EXTENT OF FINANCIAL EQUALIZATION AMONG THE STATES FROM TEN PROGRAMS OF FEDERAL AID TO EDUCATION

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Abstract of Dissertation Presented to the
Graduate Council of the University of Florida in Partial Fulfillment
of the Requirements for the Degree of Doctor of Education

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Emphasis of the study was on financial equalization tendencies of ten Federal aid programs: P. L. 81-874; P. L. 81-815; NDEA titles III and V-A; Vocational Education Act basic grants; and ESEA titles I, II, III, V, and VI-A.

Statement of Problem

The primary problem was to determine whether ten Federal aid programs, separate and combined, have equalizing or disequalizing tendencies in relation to the financial abilities of the states to support public education (K-12). Five subproblems were identified.

Of critical importance, equalization was defined as a provision in an aid program, . . . which gives statutory recognition to underlying differences in states' relative capacities . . . for financing . . . education. Equalizing relation

is an inverse relation between . . . financial ability . . . and the allocation of funds from a Federal aid program.

Procedures

Because the study involved all fifty states, no sampling technique was used. Comparisons were made between fiscal 1968-69 program allocations and states' relative financial abilities. Funds allocated were treated as allocations per child of school age and per student enrolled in public schools. Personal income per child of school age served as the financial ability indicator.

Rank-order and product-moment correlations were performed to derive relations between allocations and ability variables. A t-test compared allocations per child with allocations per student enrolled.

Through content assessment, data collected about the programs were used to describe specifically each program's intent and provisions, procedures for allocating funds, and restrictions on uses of funds. Analysis of coefficients obtained from correlating allocations and ability variables permitted description of equalizing or disequalizing tendencies of the programs separately and combined. Through converting actual dollars to standard amounts (deviations), variations in allocations among states and nationwide equalization tendencies were presented graphically and discussed. Importantly, certain features in allocation procedures were identified which influence equalization tendencies of programs nationwide and among states.

Conclusions and Implications

Several major conclusions from the study are summarized:

1. With the possible exception of NDEA Title III, the allocation procedures of each program produced a tendency in the allocations to equalize for some individual states and to disequalize for others.

2. NDEA Title III and Vocational Education Act basic grants include specific allocation procedures which demonstrate consistent recognition of states' relative abilities. However, ESEA Title I ultimately may have as much or more equalizing tendency because it includes no matching requirement.

3. ESEA Title II allocation procedures produced an apparently significant disequalizing tendency in allocation to states.

4. Disregarding matching requirements, NDEA Title III allocations indicate a greatly significant equalizing tendency. Similarly, the equalizing tendency of VEA basic grants seems definitely strong. The equalizing tendency of ESEA Title I is moderate to strong. In ESEA Title II, a significant disequalizing tendency is apparent. The six other programs reveal no significant equalizing or disequalizing tendencies. An apparent equalizing tendency of combined allocations from all programs probably is minimally significant.

Several of the study's implications are summarized:

1. Allocation procedures for various aid programs may not produce the kinds of benefits and results intended.

2. A considerable amount of duplication in the emphases of several programs could result in reduction of overall benefits possible.

3. There is need for thorough evaluation of possible disequalizing effects of required matching provisions and for reassessment and continuous evaluation of the intent and provisions of all ten programs.

4. Categorical aid does not always lend itself to specific and/or consistent recognition of differences in relative ability. A better solution to financial equalization may be found in a program offering a more general kind of financial assistance.

CHAPTER I

INTRODUCTION

The Constitution of the United States makes no direct provision for Federal participation in financing education. The tenth amendment reserves to the states respectively, or to the people, the powers not delegated to the Federal government. Necessarily, education has been, and continues to be, considered a responsibility of the individual states. However, throughout much of the nation's history, the Federal government has demonstrated a concern about elementary and secondary education and an interest in helping the various states meet their educational obligations to the youth of each state. "Federal activities in the educational field, which have grown through the years, are performed under expanding interpretations granted the general welfare clause of the Constitution."[1]

The earliest efforts of the Federal government to assist the states in establishing and maintaining free public schools were in the form of land grants, but subsequent assistance has been largely through monetary aid. The first of four major thrusts in financial assistance, the Smith-Hughes Act

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[1]Howard R. Jones, Financing Public Elementary and Secondary Education (New York: The Center for Applied Research in Education, Inc., 1966), 85.

of 1917, was for vocational education purposes. Between 1917 and 1963, aid for vocational education was extended and increased by a series of acts: the George-Reed Act of 1929, the George-Ellzey Act of 1934, the George-Dean Act of 1936, the George-Barden Act of 1946, and the Vocational Education Act of 1963.

The second substantial infusion of Federal monetary aid for elementary and secondary education was provided through Public Laws 815 and 874, enacted by the 81st Congress, which authorized funds for assistance in construction and operation of schools in districts of areas affected by Federal activities. The third and fourth large programs of Federal assistance for elementary and secondary education were provided by the National Defense Education Act of 1958 (NDEA) and the Elementary and Secondary Education Act of 1965 (ESEA).

Present Federal aid programs are of the variety frequently labeled as "categorical aid," representing basically a problem-centered approach to financial assistance. That is, Federal monetary assistance for elementary and secondary education through existing legislation is an attempt to solve problems and meet needs of national interest which have been identified by Congress. As a result, such financial aid is often, if not commonly, referred to as categorical aid. In recent years, the effectiveness and the desirability of this kind of assistance have been seriously questioned.

> It has been charged that the combined effect of numerous categorical aids has produced a deluge of red tape that has hampered public school functioning; that educational talent is being wasted in writing up applications for small amounts of

> federal money; that the emphasis upon innovation, and the search for funds to subsidize it, has resulted in the neglect of programs which have proved valuable in the past. In short, there is a growing conviction that the expanding list of federal categorical aid programs has produced confusion, instability, and distortion of educational emphasis.[2]

General aid to the states has been proposed instead. It would allocate Federal funds to states to improve their systems of elementary and secondary education through their own plans, developed from their own identification of problems and needs. That is, the Congress would not determine the specific purposes for which Federal funds could be expended.

Whether through categorical aid or general aid, the role of Federal assistance in "equalization" is a longstanding and often-discussed issue. In any discussion of equalization programs, one must identify a number of varying concepts of equalization and seek a definition for use. For example, equalization may be thought of as an allocation of a uniform amount for each state; or it may mean an equal appropriation of funds per unit of need, such as per person. Another kind of equalization may be described as grants designed and measured by the educational level of individual states in comparison to a national standard. The latter definition obviously would necessitate first deriving and analyzing the desirable educational outputs for individual states, and, in turn, supplying the largest grants to states with the lowest rankings.

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[2]Erick L. Lindman, "Criteria for Evaluating Federal Education Programs," in The Challenge of Change in School Finance, Committee on Educational Finance (Washington, D.C.: National Education Association, 1968), 26.

Although it is true that equalization may be interpreted in several different ways, it is quite often assumed that increases in financial support of education can raise the quality of educational output. If such an assumption is made, the following would seem to be an acceptable definition of equalization for the purposes of this study.

> Equalization is a provision in a grant program, either in the allocation or matching, or both, which gives some statutory recognition to underlying differences in the States' relative capacities to raise funds from their own resources for financing a joint Federal-State Program, in order to achieve more uniform standards throughout the Nation.[3]

Based on this definition of equalization, the relative capacities (or abilities) of states to support education becomes a variable of rather great importance.

According to a report by the Advisory Commission on Intergovernmental Relations, there does seem to be an inverse relation between per capita income and the distribution of all Federal grants. In other words, the poorer states are receiving greater shares of Federal grants per capita than are the wealthier states.[4] However, whether this indication of a general tendency toward greater equalization in all Federal grant programs is sufficient to overcome existing financial inequalities among the states in ability to support education is, of course, another question.

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[3]Advisory Commission on Intergovernmental Relations, Report of the Commission, The Role of Equalization in Federal Grants (Washington, D.C.: U.S. Government Printing Office, January, 1964), 48.

[4]Ibid., 27.

The Problem

The emphasis of this study was upon Federal programs of financial assistance, with special attention given to their equalizing or disequalizing tendencies in relation to the financial abilities (capacities) of the fifty states to support public elementary and secondary education.

Statement of the Problem

The primary problem was to determine the extent to which ten selected Federal aid programs have an equalizing (inverse) or disequalizing (direct) relation to the financial abilities of the fifty states to support public elementary and secondary education.

To further clarify the problem studied, the following subproblems were identified:

1. In terms of the provisions authorized in the legislation (including the procedures for allocating funds), what is the intent of the ten aid programs, and how do these provisions contribute to the tendencies of the program allocations to equalize or disequalize in relation to the financial abilities of the states?

2. In regard to each separate aid program, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per child of school age (age 5-17) and the amount of personal income per child of school age?

3. In regard to the combined allocations from the ten aid programs, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per child of school age and the amount of personal income per child of school age?

4. In regard to each separate aid program, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per student enrolled in public schools and the amount of personal income per child of school age?

5. In regard to the combined allocations from the ten aid programs, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per student enrolled in public schools and the amount of personal income per child of school age?

Delimitations and Limitations of the Study

Specific delimitations of the study are described below:

1. The study was restricted to the following ten aid programs as amended: Public Law 81-874 (Titles I and III combined); Public Law 81-815; Title III of the National Defense Education Act; Title V-A of the National Defense Education Act; the Vocational Education Act of 1963 (Basic Grants Program); and five separate programs authorized in the Elementary and Secondary Education Act (Titles I, II, III, V, and VI-A).

2. The study was concerned only with information and data among the fifty states and for the fifty states in total. That is, it was not concerned specifically or directly with governmental or administrative units within states, such as counties, municipalities, or school districts. Also, it was not concerned with the District of Columbia or the outlying territories, such as Puerto Rico, Guam, etc.

3. References to public documents were confined to pertinent selections contained in official documents, publications, and other kinds of information from the United States government considered by the researcher to be appropriate to the purposes of the study.

The following limitations of the study were identified:

1. Gross National Product, National Income, and Personal Income are frequently considered to be the most useful and reliable measures of wealth for studying the relative financial abilities of the states to support education, but Personal Income is the only one of the three that is regularly available for individual states.[5] Necessarily, the use of an indicator of financial ability per child of school age was limited to Personal Income.

2. The study was an exploratory field study and, as such, was subject to certain limitations indicated in the research design.

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[5]Roe L. Johns and Edgar L. Morphet, Financing the Public Schools (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1960), 55.

Justification for the Study

This study was one of several designed as part of the National Educational Finance Project (NEFP), funded principally under Title V, Section 505, of the Elementary and Secondary Education Act of 1965. A major purpose of the NEFP is the conceptualization of alternative models for financing public education in the United States. Necessarily, a number of studies have been and are being made to ascertain information about educational support programs currently existing among and within the fifty states.

In regard to the need for increased understanding of the role of Federal aid programs in financing elementary and secondary education, the following statements by Lindman seem to be especially appropriate.

> An important stage has been reached in the development of federal-state-local relations in education which requires a comprehensive evaluation of existing federal programs, especially those enacted in recent years. This is a difficult task. It involves gathering and comparing evidence concerning . . . many interrelated educational programs with their costs.
>
> In deciding what educational programs are worthy and appropriate for the federal government, first consideration should be given to those educational problems that transcend state lines. Recent events have shown the educational neglect in one state can be a factor contributing to riot in another. Since educational deficiencies cannot be quarantined within state boundaries, . . . the federal government clearly has a responsibility to act to strengthen public schools in all states . . . . Thus, one worthy and appropriate purpose of federal action is to make . . . grants to states to supplement state and local funds . . . to maintain an adequate basic school program for all children and youth . . . .[6]

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[6]Lindman, op. cit., 24-25.

While it is obvious that this study alone does not provide the bases needed to offer a clear-cut direction for the course future Federal aid programs should follow, there is considerable need for several studies of this kind. This study, together with other studies conducted in cooperation with the National Educational Finance Project, will provide a nucleus of research from which models of educational finance can be constructed.

Assumptions

A basic assumption of this study was that the amount of personal income per child of school age is the most reliable indicator of relative financial ability among states to support public elementary and secondary education that is regularly available from state to state.

Definition of Terms

Ability to Finance Education -- Potential resources available for financing public education. In this study the term is often shortened to "ability."

Disequalization -- The reverse of equalization effects. See definition of equalization below.

Enrolled in Public Schools -- Includes enrollment in all regular public elementary and secondary schools as reported to the U.S. Office of Education in a regular survey conducted each fall. These enrollment figures are reported by State Departments of Education. This enrollment excludes children enrolled in schools such as residential schools for exceptional

children, subcollegiate departments of institutions of higher education, Federal schools for Indians, and schools on Federal installations. It also excludes children between the ages of three and six enrolled in independent nursery schools and kindergartens and others enrolled in "special" (business and trade) schools.

Elementary and Secondary Education -- Grades K through 12 (Kindergarten through twelfth grade).

Equalization -- A provision in an aid program, either in the allocation or matching, or both, which gives some statutory recognition to underlying differences in the states' relative capacities (abilities) to raise funds from their own resources for financing a joint Federal-state program of education in order to achieve a more uniform standard throughout the nation.

Equalizing Relation -- An inverse relation between a selected indicator of financial ability to support education (e.g., personal income per school age child) and the allocation of funds from a Federal aid program (e.g., allocation of Title I, ESEA funds per child of school age).

Gross National Product -- The market value of the output of goods and services produced by the nation's economy before deduction of depreciation charges and other allowances for business and institutional consumption of durable goods.

Local School District -- A quasi-corporation, authorized or established by the state for the local organization and administration of schools. In this study it is synonymous with Local Education Agency.

National Income -- The aggregate earnings of labor and property which arise from the current production of goods and services by the nation's economy.

Personal Income -- Income payments to individuals or the current income received by persons from all sources, inclusive of transfers from government and business, but exclusive of transfers among persons.

Review of Related Trends and Research

The review of related trends and research is summarized within four different but interrelated sections. In the first section, there is provided a summary of data indicating the increasing demands on public elementary and secondary education in the United States during recent years. In section two, attention is given to the impact of rising costs of education on the nation's resources and governmental revenues. Section three briefly summarizes ten Federal aid programs which have been legislated in response to increased educational problems, needs, and costs. These ten programs are those of principal concern in this study, and they are explored in greater depth in Chapter II. In section four, an effort is made to review research findings of several studies which are related to the problem investigated in this study.

Increasing Demands on Education

Since 1958, total expenditures for public education in the United States have increased by approximately 143.6

percent.[7] This rather large increase can be explained best in terms of (1) enrollment increases, (2) efforts to upgrade and expand educational programs, and (3) cost increases per unit of service.

Enrollment increases

The increased number of school age children (age 5-17) in the population, of course, accounts for a rather substantial amount of the growth in public school enrollment. From the 1959-60 school term to 1968-69, the percentage of school age children enrolled in public schools increased from 82.1 percent to 85.6 percent. This represented an increase of nearly ten million students during the decade.[8]

However, other factors are contributing to enrollment increases which are not as evident as those indicated above. For example, the steadily growing retention rate has added substantially to the enrollment burdens of the schools. Here, it can be noted that for every 1,000 children entering the fifth grade in 1942-43, only 505 graduated in 1950, while, for every 1,000 entering in 1959-60, an estimated 721 graduated in 1967.[9]

In addition, there has been a gradual lengthening of the school year, from an average of 175.0 days in 1940 to

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[7]National Education Association, Research Division, Estimates of School Statistics, 1968-69 (Washington, D.C.: National Education Association, 1968), 19.

[8]Ibid., 8.

[9]Kenneth W. Simon and W. Vance Grant, Digest of Educational Statistics, 1968 Edition (Washington, D.C.: Government Printing Office, 1968), 7.

177.9 days in 1950 to 178.9 days by 1966.[10] Although this is not an indicator of an increased number of students in school, it does show that they are in school for a longer period of time per year. A longer school year would seem to produce some of the same results as increased enrollment, such as higher costs for transportation and for operation and maintenance of facilities.

Efforts to improve the educational program

One may argue that a second major contributor to the expenditure increase is to be found in attempts to improve the quality of education. "Quality" may involve a great number of factors ranging from more adequate teacher preparation to more adequate facilities; nevertheless, one frequently used measure is the pupil-teacher ratio. Analysis of data about the pupil-teacher ratio reveals that the proportion of teachers has been increasing in comparison to the number of students. The number of pupils per classroom teacher decreased from 27.5 in 1950 to 26.0 in 1960, and had reached 24.1 pupils per teacher by 1966.[11]

Cost increases per unit of service

A third major reason for rising public school expenditures can be attributed to general cost increases throughout

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[10] Ibid., 27.

[11] From data in U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States, 1968 Edition (Washington, D.C.: U.S. Government Printing Office, 1968).

the nation's economy. Construction, equipment, maintenance, and transportation costs have risen steadily, and the cost of education has not escaped the rise. Average instructional salaries for supervisors, principals, classroom teachers, and other instructional staff more than doubled (in current dollars) from $3,010 in 1949-50 to $7,630 in 1967-68. In adjusted dollars of 1967-68 purchasing power, the same average increase in instructional salaries was from $4,325 to $7,630 in the same time period.[12]

These rising cost levels are reflected in the steady growth in per pupil expenditures. Expressed in dollars of 1967-68 purchasing power, total expenditures per pupil in average daily attendance rose from $372 per pupil in 1949-50 to $547 in 1959-60, to $750 in 1967-68.[13] This measure of increase in expenditures, which represents expenditures for capital outlay and debt service as well as for current expense, amounts to over a 100 percent increase within two decades.

Impact on National Resources and Governmental Revenues

While public school costs have grown rapidly in recent years, the nation's economy also has undergone a rapid growth. The proportion of the nation's economic resources used for public school support can be measured by comparing public school expenditures with the total national output of goods and services, the Gross National Product (GNP). This comparison

[12] Simon and Grant, op. cit., 43.

[13] Ibid., 61.

shows that the percentage of GNP devoted to the public schools has increased rather substantially since 1950, from 2.18 percent in 1949-50 to a high of 4.03 percent in 1967-68.[14] This increase in public school expenditures, from $5.8 billion in 1949-50 to $31.9 billion in 1967-68, appears to have been a part of a general rise in spending at all levels of government. To support this general rise in spending, large increases in the amount of revenue have been needed at all governmental levels.

Although increases in Federal tax revenues since 1949 have been quite large, increases at state and local levels have been even higher in terms of percent of increase. Of significance, increasing proportions of the total amounts of revenue at all levels of government have been provided for support of public education since 1950. Federal school aid expenditures rose from $155.8 million in 1949-50 to nearly $2.6 billion in 1967-68. During this same period, the percentage of Federal tax revenue allocated for support of education increased from less than 0.5 percent to over 2.0 percent.[15] This substantial increase, both in amount and percent of total tax revenue at the Federal level, reflects the impact of the Elementary and Secondary Education Act of 1965.

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[14]Computed from data in Simon and Grant, op. cit., and National Education Association, Research Division, op. cit.

[15]Computed from data in Simon and Grant, op. cit., and U.S. Department of Commerce, Bureau of the Census, op. cit.

During this period of substantial increases in support of education from Federal sources, state tax revenues also increased substantially. Yet the proportion of state revenue going to support education also increased, from 29.4 percent to 36.4 percent. Throughout the period, the school revenue impact fell heaviest on local taxes. In 1949-50, school support consumed 42.0 percent of local taxes and rose to a high of 52.6 percent in 1964-65. Although there has been a slight percentage decrease since 1964-65, the amount of local support for schools increased by nearly $3 billion by 1967-68, an amount almost equal to the total expenditure from local sources in 1949-50.

The fact that all levels of government have allocated increased amounts of funds to support education suggests a need to determine the relative contributions to school support from Federal, state, and local sources. In 1949-50, Federal contributions amounted to 2.9 percent of the total, state support was 39.8 percent, and local funds made up 57.3 percent. In 1959-60, the Federal contribution was 4.4 percent, state effort was 39.1 percent, and 56.5 percent came from local sources. In 1967-68, it is estimated that 7.7 percent of public school expenditures were from Federal sources, 40.3 percent from state support, and 52.0 percent from local revenues.[16]

Federal Response to Increased Demands on Education

As suggested previously, most present programs of Federal aid to education are in the form of categorical aid,

[16] Simon and Grant, op. cit.

representing basically a problem-centered approach to financial assistance. With passage of the National Defense Education Act of 1958 and the Elementary and Secondary Education Act of 1965, the Federal government increased substantially the number of categorical aid programs. Following is a brief overview of ten aid programs that have been enacted since 1950. These are the programs of principal concern in this study, and they are reviewed in considerable depth in Chapter II.

P. L. 81-874--school assistance in federally affected areas

Enacted in 1950, P. L. 81-874 is designed to assist over 4,000 school districts throughout the nation. It is generally considered to be one of the most wide-spread programs of Federal aid to education. Assistance is allocated directly to local school districts for current operating expenses, and, as such, might not be strictly construed as categorical aid.

P. L. 81-815--school assistance in federally affected areas

This law was originally passed in 1950 to provide assistance for school construction. Funds can be provided to local districts to help meet school construction needs when evidence indicates that children in federally affected areas cannot be housed without additional assistance in providing facilities.

P. L. 85-864--National Defense Education Act

The National Defense Education Act (NDEA) was initially passed in 1958 and encompasses various types of categorical assistance to local school districts, although all of the benefits in all titles of the original act are not necessarily in the form of cash payments.

Title III of NDEA authorizes funds for the purchase of equipment and materials to strengthen instruction in science, mathematics, history, civics, geography, modern foreign languages, English, and reading. Provision is included for acquisition of test grading equipment, but not for textbooks or consumable supplies.

Title V assistance is for guidance and counseling programs for elementary and secondary schools, but not for textbooks or consumable supplies. Part A of Title V also is designed to provide a program of testing for all students attending public elementary and secondary schools in an effort to identify students with exceptional abilities and aptitudes.

P. L. 88-210--Vocational Education Act of 1963

This act, frequently referred to as the Morse-Perkins Act, authorized a new permanent program of Federal assistance to vocational education. In order to receive funds, a state must have an approved state plan, and it is required that a cooperative arrangement must be developed between vocational education agencies and public employment offices so that

occupational information will be available for counseling students and determining the occupations for which persons are to be trained.

P. L. 89-10--Elementary and Secondary Education Act of 1965

The Elementary and Secondary Education Act of 1965 (ESEA) is often regarded as the greatest legislative commitment to elementary and secondary education ever made by the Federal government.

Title I of ESEA was enacted to provide financial assistance to local education agencies serving high concentrations of children from low-income families. Funds must be employed to expand and improve educational programs through means which contribute to meeting the special needs of educationally disadvantaged children.

Title II provides funds for the acquisition of school library resources, textbooks, and other printed and published instructional materials for the use of children and teachers in public and private elementary and secondary schools.

Title III provides funds for the establishment of supplemental educational centers and services to stimulate and assist in the provision of vitally needed educational services, and to promote the development of exemplary elementary and secondary educational programs. Provision is made for materials and equipment needed to implement the programs.

Title V was enacted for the purpose of strengthening state departments of education. Funds can be used for special programs to improve services to local school districts in

either general or more specialized areas of education. One feature of Title V is in its provision for dissemination of information concerning the condition, progress, and needs of education.

Title VI, as amended in 1966, was enacted to give assistance to states in providing and extending educational opportunities for handicapped children. The title also established a Bureau for Education and Training of the Handicapped, as well as a National Advisory Committee on Handicapped Children.

In summary, all of the allocations under these programs are restricted to special purposes except the funds provided through P. L. 81-874, School Assistance in Federally Affected Areas, and even these funds can be allocated only to school districts impacted by Federal activities. In this regard, in his chronology which summarizes forty-seven Federal aid programs, Kurth stated:

> While thirty-six different purposes were identified, . . . many different Federal acts are aimed at accomplishing the same purpose or purposes. In fact there is an amazing amount of duplication. This makes it difficult for a local school system to use Federal aid efficiently in developing a balanced school program. A consolidation and simplification of Federal acts aiding education, . . . would no doubt improve the efficiency of administration.[17]

Related Research

Bontrager conducted a study designed to determine the extent of fulfillment of Federal responsibility to educate

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[17]Edwin L. Kurth, Federal Aid to Education (Gainesville, Florida: Florida Educational Research and Development Council, 1968), 4-5.

children in federally impacted areas. Materials and data used in the study were laws enacted by Congress, the Congressional Record, House and Senate committee reports, and the annual report of the Commissioner of Education. Among the items discussed in the study were the background of effort by the Federal government to provide education for the nation's citizens and the background of provision for school construction, school maintenance, and school operation in federally affected areas. As a result of the study, Bontrager tentatively concluded that the problem in establishing a local-state-Federal partnership in education, where such effort has been "avoided, thwarted, or otherwise denied," can be solved in qualifying communities by fulfillment of a national responsibility to educate federally connected children through Public Laws 81-815, 81-874, and 84-388, all as amended.[18]

For his doctoral dissertation at The Ohio State University, Bennion studied the formation of Federal educational policy. This was defined in the study as Federal legislation and administrative guidelines which identify educational needs and goals, and allocate funds pursuant to those needs and goals. Bennion focused on the political action phase of policy formation as it applied to the Elementary and Secondary Education Act of 1965. Specifically, the study was an analysis of the provision of the Act, the committee hearings, and the floor debates which preceded the passage of the Act. The study

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[18]Ralph L. Bontrager, "A Study of the Fulfillment of Federal Responsibility to Educate Children in Federally Impacted Areas" (Ed. D. dissertation, University of Kansas, 1965).

was delimited to two issues, aid to parochial schools and Federal control. Bennion identified the provisions of the Act which were relevant to the issues, and then analyzed the antecedent movements. The methodology used was content assessment of the documents examined. Categories for analysis were subject matter, direction (pro and con), standard (basis for direction), and source. Among the conclusions reached as a result of the study were: (1) ESEA received very broad support from special-interest groups which have often been at great odds in deliberation on previous Federal legislation concerning education; (2) programs under the Act call for new relationships between the Federal government, the states, and local educational agencies. There will be much greater interdependence among the three levels of government than heretofore; (3) the categorical nature of the aid and the programs establishes the Federal government as a policy-maker in education. All of the programs under the Elementary and Secondary Education Act are directed toward certain needs identified by the Congress and the administration; and (4) in interpreting and providing for administration of the Act, the administrative guidelines became a part of the policy-making process.[19]

Webb attempted to evaluate administrative processes and procedures in programs for educationally deprived children implemented under Title I, Public Law 89-10. His study was

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[19]John W. Bennion, "The Formation of Federal Educational Policy in the Elementary and Secondary Education Act of 1965" (Ph. D. dissertation, The Ohio State University, 1966).

focused on selected schools in the state of Texas, and employed a case study procedure which involved direct observations, interviews, and the use of an interview instrument. He concluded that Federal aid to education was needed by a majority of schools in the congressional district studied, and that congressional budget control negates long-range planning. Also, in the district studied, he concluded that program development was focused on economically deprived students, but not limited to them.[20]

The Advisory Commission on Intergovernmental Relations, in a study which compared 1961 state per capita incomes with fiscal 1962 distributions of $7 billion in Federal grants, concluded that there does seem to be an inverse relation between per capita income and the distribution of all Federal grants, "although not a significant one." The correlation coefficient was -.041. The Commission report states that Federal grant programs (as of the end of 1962) which use an index of state fiscal capacity as a factor in the distribution of funds base this index on relative state per capita income.[21]

However, the Commission suggests further that the relation between grants and resources of the states may be viewed from another perspective, as indicated in the following:

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[20]Robert D. Webb, "A Study of Federal Assistance to Education under Title I, Public Law 89-10 in Selected Schools of the Nineteenth Congressional District of Texas" (Ed. D. dissertation, Texas Technological College, 1967).

[21]Advisory Commission on Intergovernmental Relations, op. cit., 63.

> At present the total Federal grant package requires the poorer states to devote a larger share of their fiscal capacity than wealthier states to meeting the required matching provisions. The grants, however, do contribute substantially to a greater uniformity of tax effort than would be the case without these aids . . . . Were the states to maintain existing levels of expenditures in the absence of Federal aids, tax effort of the poorer states would have to rise in most states by 30 to 40 percent, while tax effort in most of the high per capita income states would have to go up only 15 to 20 percent.
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> In the past, despite the relatively lower level of public services they provide, the poorer states' tax effort has been substantially above the tax effort of the wealthier jurisdictions. . . . In short, the weight of explicit equalization factors is not large.[22]

Alexander, in a discussion of contemporary trends and issues in school finance, suggests that in analyzing Federal categorical grants, the distribution procedures and expenditures restrictions are of primary importance. In this regard, he states:

> The procedures for distribution among the states is a subject of great controversy when any grant legislation is devised. The various states advocate distribution measures designed to meet their individual needs best. While some factors and variables may benefit one state more than another, it is generally conceded that factors that equalize educational opportunity among the states should be included. Equalization here means statutory recognition of underlying differences in states' relative capacities to support a desirable education program.[23]

Through the use of data from a portion of an unpublished report for the Title V Advisory Council on State Departments

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[22] Advisory Commission on Intergovernmental Relations, op. cit., 64.

[23] S. Kern Alexander, "Trends and Issues in School Finance," in Interdependence in School Finance, Committee on Educational Finance (Washington, D.C.: National Education Association, 1968), 154.

of Education in 1967, he reported the following information about seven Federal aid to education programs.

> In this study, seven federal elementary and secondary distributions were selected to measure the equalization tendencies of federal funds among the states. These funds represented nearly $2 billion for the 1966-67 school year. The distributions selected were Titles I, II, and III of ESEA; Titles III and V-A, NDEA; P. L. 874; and vocational education funds. The vocational funds represented approximately 80 percent of the funds distributed under the Smith-Hughes Act, the George-Barden and Supplemental Acts, and the Vocational Education Act of 1963.
>
> The formula allocation for each one of these funds was compared with the wealth of the state by using personal income per pupil ages 5-17 as a measure. Use of the Spearman Rank Order method found that all seven funds together showed an inverse correlation of -.653. Since a decline in wealth should be matched by corresponding increase in funds per pupil for equalization to exist, the -.653 inverse correlation indicated a moderate equalization tendency. Specifically, the program that provided the least equalization and actually provided for the rich to get richer was Title II of ESEA which had a coefficient of +.47. Programs which had no equalization tendencies were Title III, ESEA, and P. L. 874.[24]

The study reported by Alexander is quite similar in several respects to this study. In commenting about the findings of his study, Alexander suggested that the new 1967 amendments for Title I would enable that program to substantially increase in its equalization tendency among states in the 1967-68 school year. Also, he suggested that, in light of Congressional action in 1967, Federal programs would continue and possibly increase the emphasis toward utilization of relative fiscal capacity measures

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[24] Ibid., 154.

among the states. The findings of this study provide a basis for determining the extent to which these increases have actually materialized.

A study by Anderson in 1967 attempted to analyze and evaluate the extent to which Title I of ESEA provided financial assistance to low-income areas in the United States. The study was further concerned with investigating recommendations for the distribution of Federal financial aid to education and to suggest a revision of the Title I aid distribution plan. Anderson examined the financial relationship of the Title I money allocation and (1) a measurement of financial ability of states utilizing personal income per school age child and (2) a measure of local school district financial ability utilizing adjusted assessed valuation per pupil in average daily attendance. A financial ability index representing the adjusted valuation per pupil in ADA of the local school district was used in the development of a hypothetical formula. A hypothetical program was computed for the state of Indiana to examine the utility of the model. All Indiana school districts which received Title I funds were included in the model. A proper relationship was not found between the Title I allocation to Indiana school districts and local financial ability. That is, the distribution of funds did not inversely correspond to per pupil assessed valuations of the local school districts. Evidence found in Anderson's study did indicate that the Title I distribution plan functioned effectively at the state and regional levels.

Therefore, he concluded that the present Title I plan for distributing money to the states should remain constant.[25]

Procedures

This investigation was an exploratory field study. Such studies are designed to (1) identify significant variables as they exist in a real situation; (2) discover relations among the variables; and, (3) provide a basic framework for future development, refinement, and testing of hypotheses.

The exploratory study as a method of inquiry has several strengths and weaknesses that have been identified. Among the weaknesses are the ex post facto nature of these studies, the large number of variables involved, and the lack of means for precise measurement of these variables. On the other hand, they are realistic and significant in that they deal with a "real world" situation or condition, and they have a significant heuristic quality.[26]

Study Design

Because this study involved all of the fifty states in the nation, no sampling technique was used. Ten Federal aid programs were selected because they are generally considered to represent the most important recent attempts of the Federal government to provide financial assistance to

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[25]Myron L. Anderson, "A Financial Analysis of Title I, Public Law 89-10, and the Formation of a Defensible Federal Financial Aid Plan" (Ed. D. dissertation, Indiana University, 1967).

[26]Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, 1964), 388-391.

elementary and secondary education, and because the allocation of funds in support of these programs amounts to approximately 80 percent of Federal expenditures for elementary and secondary education.

The study was designed to compare the allocation of funds to the states from the ten aid programs with the relative abilities of the states to support public elementary and secondary education. Comparisons were made on the basis of funds allocated per child of school age (age 5-17), and on the basis of funds allocated per student enrolled in public elementary and secondary schools.

Personal income per child of school age was used as the measure of relative financial ability of the states. (Personal income is the current income received by persons from all sources, inclusive of transfers from government and business, but exclusive of transfers among persons.) The personal income for each state was divided by the number of persons 5-17 years of age in each state to obtain the personal income per child of school age.

For each of the two allocation variables, per child of school age and per student enrolled in public schools, eleven comparisons were made. Ten of these compared specific program allocations, such as Title I of ESEA, to state ability. The eleventh compared the total of the ten allocations to state ability.

Through both the rank-order and product-moment methods of correlating data, coefficients of correlation were obtained to determine the extent of the inverse or positive relation

between the allocation variables and personal income per child of school age. A perfect inverse relation (-1.00) would represent a perfect equalizing relation between the variables; no relation (0.00) would represent no equalizing or disequalizing relation between the variables; and a perfect positive or direct relation (+1.00) would represent a perfect disequalizing relation between the variables.

Both methods of correlating data were used to determine whether they would yield different results. Because the product-moment method is considered by many statisticians to be a "parametric" statistical procedure and the rank-order method to be "non-parametric," writers frequently suggest that the product-moment method yields a more accurate indication of the relation between variables.

Following are the formulae used for the rank-order and product-moment procedures:

Rank-order correlation

$$r = 1 - \frac{6 \Sigma D^2}{n(n^2-1)}$$

Product-moment correlation

$$r = \frac{\Sigma xy}{\sqrt{(\Sigma x^2)(\Sigma y^2)}}$$

A test of significance was applied to the coefficients obtained from the product-moment method, as indicated below:

$$t = \sqrt{\frac{(n-2)r^2}{1-r^2}}$$ has a t distribution of n-2 degrees of freedom

The test was applied to each coefficient through formulating the following problem:

1. $H_0 : r = 0$ (i.e., r is not significant)

2. $H_1 : r \neq 0$ (i.e., r is significant)
3. If H_0 is not rejected, it will be retained.
4. level = .05 t .05 at 48 df = 2.006
   level = .01 t .01 at 48 df = 2.679
5. If calculated $t \leq -2.006$ or $\geq +2.006$, reject H_0 and retain H_1 at .05 level.
   If calculated $t \leq -2.679$ or $\geq +2.679$, reject H_0 and retain H_1 at .01 level.

To assist in comparing the two methods of examining program allocations (allocation per child of school age and allocation per student enrolled in public schools), a t-test was used to determine whether there is a significant difference in the means of these allocations to the states from a given program. For example, a t-test was used to compare the mean of P. L. 81-874 allocations to the states per child of school age with the mean of P. L. 81-874 allocations per student enrolled in public schools. Since the t-test is essentially a procedure for "analysis of variance," the results obtained seem to give some indication of whether there is a significant difference between the two allocation variables; i.e., the two ways of examining allocations from a specific program.

Prior to the application of a t-test, as described above, the f-test was used to determine if the "pooled" or the "separate group" t-tests would be more appropriate for use. The procedure is summarized below:

$$f = \frac{s_g^2}{s_l^2} \quad \text{where} \quad s_g^2 = \text{the greater variance}, \quad s_l^2 = \text{the lesser variance}$$

2. f .01 level at $\frac{50}{50}$ df = 2.06
3. If calculated f < f .01 level at $\frac{50}{50}$ df (i.e., 2.06), use "pooled" variance t-test.
4. If calculated f ≥ f .01 level at $\frac{50}{50}$ df (i.e., 2.06), use "separate group" t-test.

In each of the eleven pairs of means to which a t-test was applied, the results obtained from the f-test indicated that the pooled variance t-test was appropriate. Following is a formula for this procedure:

$$t = \frac{(\bar{x}_1 - \bar{x}_2) - (m_1 - m_2)}{\sqrt{\frac{s_1^2 + s_2^2}{2}\left(\frac{1}{n_1} + \frac{1}{n_2}\right)}} \quad \text{with df} = n_1 + n_2 - 2$$

The test was applied to each pair of means through formulating the following problem:

1. $H_0 : \bar{x}_1 - \bar{x}_2 = 0$ (no significant difference)
2. $H_1 : \bar{x}_1 - \bar{x}_2 \neq 0$ (is significant difference)
3. If H_0 is not rejected, it will be retained.
4. level = .05 t .05 at 98 df = 1.984
   level = .01 t .01 at 98 df = 2.628
5. If calculated t ≤ - 1.984 or ≥ + 1.984, reject H_0 and retain H_1 at .05 level.
   If calculated t ≤ - 2.628 or ≥ + 2.628, reject H_0 and retain H_1 at .01 level.

To further assist in comparing allocations with personal income (as well as allocations per child of school age with allocations per student enrolled in public school), actual dollar amounts were converted to standard (z) dollars through the following procedure:

$$z = \frac{\text{dollar amount} - \text{mean}}{\text{standard deviation}}$$

Also, the standard (z) dollars represent the extent of standard deviation from the mean associated with the actual dollar amounts.

Data Collection

The data collected were of two distinctly different kinds. The first kind was information concerning the intent of the ten aid programs in terms of provisions embodied in the specific legislation which authorizes them. In close conjunction with these data is information collected in the form of important public pronouncements concerning the bases or rationale of the legislation. As indicated previously, data of this kind were delimited to selected pertinent pronouncements contained in official documents and publications of the United States government.

In order to derive correlation coefficients and perform the other statistical procedures described previously, the second kind of data collected includes (1) the total amount of the allocation to each state from each of the ten aid programs for fiscal year 1968-69, (2) the estimated number of school age children in each state for July 1, 1968, (3) the number of students enrolled in public schools in each state in the fall of 1968, and (4) the estimated personal income of each state in the first quarter of 1969.

Data Treatment

To the extent possible, the data gathered about the intent and provisions of the legislation were used to describe

specifically each of the aid programs, the methods and formulae for allocating funds, and the kinds of restrictions imposed on states in using the funds allocated. The information collected relative to important public pronouncements was used to describe what was believed, understood, or assumed about the aid programs in terms of the rationale for their enactment and for subsequent amendments.

The funds allocation, school age population, public school enrollment, and personal income data were used to determine the extent to which an equalizing (inverse) or disequalizing (positive or direct) relation exists between program allocations and the indicator of relative financial ability (personal income per child of school age). When these relations were analyzed, the extent of a nationwide equalizing tendency was determined and described in regard to each of the ten programs and the ten programs combined. Also, relations between allocations and ability were analyzed and discussed both in terms of allocations per child of school age and allocations per student enrolled in public schools.

Through the procedure identified previously, the extent of the variation in allocation of funds among the states was illustrated in graphic form and discussed. By inspection, the differences between the allocation per child variable and the allocation per student enrolled variable were described and discussed.

Finally, but of considerable importance to the study, an attempt was made to identify and describe certain factors

in the provisions and methods of allocating funds, as authorized and/or prescribed in the legislation, that appear to influence the extent of the equalizing (inverse) or disequalizing (direct) relation between program allocations and the indicator of relative financial ability.

CHAPTER II

LEGISLATIVE INTENT AND PROVISIONS OF THE TEN AID PROGRAMS

Since 1950, developments in Federal aid to elementary and secondary education have significantly affected the national system of public school finance and other governmental relations. In regard to such affects, Labovitz has stated:

> The special programs have been used as weapons and goads in congressional jousting over federal financial aid for elementary and secondary education . . . . Emphasis in these programs on intergovernmental sharing of responsibilities already has affected . . . the prevailing pattern of relationships in the operation and financing of various public services. It is quite possible that this conception will infuse the future evolution of other intergovernmental relations.[1]

There are many issues involved in the enactment of legislation for Federal aid to education. Some writers have suggested that "the struggle over federal aid has not been a single conflict, but rather a multiplicity of controversies only loosely related to one another."[2] In addition to the

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[1] I. M. Labovitz, Aid for Federally Affected Public Schools (Syracuse, New York: Syracuse University Press, 1963), x.

[2] Frank J. Munger and Richard F. Fenno, Jr., National Politics and Federal Aid to Education (Syracuse, N.Y.: Syracuse University Press, 1962), 19.

basic conflicts between proponents and opponents of Federal aid, the issues have included controversies over race and religion, as well as conflicts about the form or kind of financial assistance that should be given. The significance of these and other issues to Congressional efforts to pass legislation for Federal aid was effectively summarized by Senator Lister Hill of Alabama. In the 1948 floor debate over Federal aid, he told the Senate:

> Mr. President, bills similar to this one have been before the Senate for many years. Volumes of hearings have been taken. If we were to bring into the chamber from the Committee on Labor and Public Welfare the many volumes of hearings, they would be piled high on our desks. Year after year, the committee has held hearings. Year after year, the committee has spent weeks considering the bill, attempting to reconcile differences, attempting to wipe out inequities, attempting to bring forth the best possible bill to provide Federal aid . . .[3]

In the nearly 22 years that have passed since Senator Hill made the preceding remarks on the floor of the Senate, proposed programs of Federal aid have continued to evoke at least equally as much controversy and debate as he described.

The purpose of this chapter is to provide basic information necessary for understanding and assessing the ten aid programs of concern in this study. In brief, it gives attention to salient points in the origins and legislative development of the programs, and to reviewing important statutory provisions of the legislation authorizing them.

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[3]80th Cong., 2d Sess., 94 Congressional Record (1948), 3290.

School Assistance in Federally Affected Areas (SAFA)--Public Law 81-874 and Public Law 81-815

Since its establishment, the United States government has found it necessary to own real property and to operate various kinds of facilities in the states. Today, the Federal government owns and operates a wide variety of facilities for numerous purposes including postal services, national defense, space programs, transportation, agricultural research, recreation, and atomic energy research. These and other Federal facilities and activities have created problems, as well as many benefits, for the states in which they are found. Although many of the problems appear to have been resolved, significant ones still remain. One of the remaining problems is the question of paying for the education of students who in some way are connected with activities of the Federal government.

In the fall of 1949, House subcommittees began extensive investigations of the impact on local school districts of federally connected children. These subcommittees began a statistical study of affected school districts, with the cooperation of state education agencies. Also, they conducted extensive hearings at which they heard from officials of interested Federal agencies and school districts. "Field investigations took the subcommittees into 23 communities. Testimony was given by approximately 600 witnesses from 42 states . . . . The resulting transcript filled nearly 2,400 closely printed pages."[4]

[4]I. M. Labovitz, op. cit., 34.

In early 1950, the subcommittees issued a joint 149-page report which incorporated the survey data and their recommendations for action. The hearings and report have been characterized as indicating that the subcommittees were convinced that Federal government activities imposed severe financial burdens on a considerable number of school systems. The burdens were found to be so severe that, in many cases, children were deprived of minimum educational opportunities. In addition, it was indicated that "contemporary developments would intensify the difficulties" for some districts, and that the Federal government should "establish a permanent policy accepting responsibilities for both current operating expenses and additional school plant facilities."[5]

The recommendations of the subcommittees provide a background for analysis of the legislation subsequently enacted. Their proposals have been summarized in the following points:

> 1. The federal government has a responsibility to provide financial assistance to school districts overburdened with costly educational loads because of federal activities.
>
> 2. The federal government should establish a permanent policy recognizing its responsibilities to provide necessary financial assistance to school districts overburdened by federal activities, to enable them to provide adequate educational opportunities.
>
> 3. This federal financial assistance should provide for both current operating expenses and additional plant.
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> 4. The plan for current expense should be on a continuing basis so that school districts can plan from year to year.

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[5] Ibid.

5. The plan for school construction must assure that urgently needed facilities will be provided without delay to meet needs already incurred and those arising from future federal impacts.

6. Federal assistance for current operating expense should be administered by the Commissioner of Education in cooperation with state educational agencies.

7. The legislation should enable eligible school districts to supplement with federal assistance any revenues available to them under state plans.

8. Federal financial assistance should enable an affected district to provide a school program at approximately the same level as comparable districts in the state that are not affected by federal activities.

9. This program should be designed to encourage acceptance of responsibility by state and local units of government. It should not discourage desirable changes within each state in provisions for financing or administering public schools.

10. Assistance for construction of facilities already urgently needed should be programmed on a two-year basis to assure their immediate provision.

11. Federal assistance for construction should be administered by the Commissioner of Education in cooperation with the Commissioner of the Bureau of Community Facilities.

12. The legislation should permit allotments for operation of schools on federal reservations where the state or local educational authorities are prohibited from operating schools or where, for other reasons, local school agencies are unable to assume the responsibility. It is hoped that this provision would be necessary for only a temporary period. The objective should be that all schools for children residing on federal property will be operated by regularly constituted public school officials just as soon as possible.

13. Federal assistance called for in these recommendations is restricted to meeting the federal responsibility only in these affected school districts. It is not intended to provide assistance that would be available under proposals for general federal aid.

14. Existing provisions for assistance to school districts educating children from Indian reservations should be continued temporarily. The legislative proposals of the subcommittees would not cover health and welfare services provided under the special programs for Indian children.

15. Schools on Atomic Energy Commission reservations at Oak Ridge, Tennessee; Los Alamos, New Mexico; and Richland, Washington, should be excluded from the proposed legislation.[6]

On the floor of Congress, the views of proponents of financial assistance to school districts affected by Federal activities have been stated effectively by Congressman Brown of Ohio. Speaking in behalf of H. R. 7940, the House version of the legislation eventually resulting in P. L. 81-874, Congressman Brown stated:

> H. R. 7940 was reported, I believe, unanimously by the Committee on Education and Labor, and the rule sending the measure to the floor was reported unanimously by the Rules Committee.
>
> The Congress has taken similar steps in the past. The first was under the so-called Lanham Act, which gave aid to those schools which were hard hit by the war economy and the great expansion of Government ownership throughout the Nation during the war years.
>
> I am especially interested in this measure because I have in my own district a part of Wright Field and all of Paterson Air Base. I know something of that which has happened there, where the Government has taken a great deal of the land off the tax duplicates in various school districts, for the use of the Air Force, and at the same time sent into these school districts a great many additional families with children. I have seen these school districts stagger along, attempting to furnish educational facilities to the children who are asking for an education. I have seen the people of these districts vote extra tax levies for school purposes, up to the limit permitted by law, taxing themselves, not only to take care of their own children, but to take care of the children who came from

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[6] As reported in ibid., 35-36.

elsewhere, and have been brought there because of the employment of their parents at the Government installations or because their fathers were part of the military forces of the Nation. So I think it is only fair and just that we enact legislation such as this, so that Uncle Sam, the National Government, pays a fair share of the cost of operating these school facilities. Certainly, if you or I, as a private businessman or the head of a corporation, would go to any school district of America, buy up a great deal of land and build a factory there, we would be taxed to pay our fair share of the cost of maintaining the local schools to give an educational opportunity to the children of the people we employ. But, seemingly, that rule has not always applied to the Federal Government. Instead, the Federal Government has taken land and property off the tax duplicate, thereby placing a heavier burden than ever before upon the remaining property. Then, in addition, it has caused a great influx of new children, swamping the school facilities of that area.

Mr. Jenkins. It is true, is it not, that in those districts the load has become so heavy that now the people who live in the community cannot finance it, and the schools are so overcrowded that nobody gets justice?

Mr. Brown of Ohio. The gentleman from Ohio (Mr. Jenkins) is entirely right. I know of school districts in our own State where not only are the school facilities inadequate but the local areas cannot possibly bond themselves to build needed new facilities.

There are school districts . . . where the schools are being operated at a deficit; the local banks and private citizens are advancing the money to meet those deficits even though the people are taxing themselves to the limit, and have voted extra tax levies to maintain the schools.[7]

In brief, through the enactment of Public Law 81-874 and Public Law 81-815 in 1950, the Congress initiated a Federal policy for assisting school districts financially burdened as a result of new or expanded Federal activities. At the time the bill was enacted, no one could accurately

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[7] 81st Cong., 2d Sess., 96 Congressional Record (1950), 10092.

predict how long the programs would be needed, on what scale they would be needed, or what the initial or continuing costs would be. A review of the operation of the programs shows "a steady growth in the aid program authorized by P. L. 81-874, and after the first three or four years a leveling out and gradual tapering off for the school construction program authorized by P. L. 81-815."[8]

Public Law 81-874--Legislative Provisions and Method of Allocation

Titles I and III of Public Law 81-874 authorize financial assistance for the maintenance and operation of schools in local school districts where enrollments are affected by Federal activities. More specifically, provision for such assistance is contained in sections 1 through 6 of Title I and sections 301 through 303 of Title III of the Act. (Section 7 of Title I extends financial assistance to local education agencies affected by a major disaster.)[9]

Funds are allocated to eligible school districts which provide free public education to children who live on Federal property with a parent employed on Federal property -- Section 3(a); to children who either live on Federal property or live with a parent employed on Federal property, but not both -- Section 3(b); to those districts having a substantial increase

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[8]U.S. Department of Health, Education, and Welfare. Office of Education, Administration of Public Laws 81-874 and 81-815, Eighteenth Annual Report of the Commissioner of Education, June 30, 1968 (Washington, D.C.: U.S. Government Printing Office, 1969), 1.

[9]Ibid., 5.

in school enrollment resulting from Federal contract activities with private companies -- Section 4; and to school districts where there has been a loss of tax base as a result of the acquisition of real property by the Federal government -- Section 2. Where no state or local educational agency is able, because of state legal restrictions or other specified reasons, to provide suitable free public education to children who live on Federal property, the Commissioner of Education is required by provisions of Section 6 to make arrangements for such education.[10]

Under existing legislation, a local school district is eligible for payment for all of its sections 3(a) and 3(b) pupils if (1) the pupils amount to at least ten in number and represent at least 3 percent of the district's total number of children in average daily attendance during the year, or (2) the number of eligible pupils amount to 400, whichever is lower. For Section 3(a) pupils, the district is paid at a rate per child which is equal to the rate derived from expenditures from local sources in generally comparable school districts in the same state, or one-half the state average per pupil expenditure, or one-half the national average expenditure. All data used in determining the rate of payment are taken from data of the second fiscal year preceding the year for which application for assistance is made.

For Section 3(b) pupils, the district is paid at 50 percent of the rate paid for Section 3(a) pupils. The maximum

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[10] Ibid.

entitlement of school districts under Section 4 is the product of the accepted average daily attendance and the per pupil expenditure in generally comparable districts minus the amount determined to be available from local, state, and Federal sources, exclusive of payments under this Act and local funds needed for the education of other children.

Maximum entitlements under Section 2 are derived from the product of the applicant's current expense tax rate applied to the estimated assessed valuation of the Federal property, exclusive of improvements since the date of transfer. Under Section 6, Federal funds pay the full cost per pupil, not to exceed the per pupil expenditure in comparable school districts in the same state.[11]

Section 302(a) of Title III provides a program of reimbursement to other Federal agencies for certain educational services provided for children residing on Federal property, as explained in the following:

> Federal agencies may provide custodial, transportation, or maintenance services for children residing on Federal property and attending a school district which, because of State law or other factors, is unable to reimburse the Federal agency. In such instances, the Commissioner may authorize transfer of funds to the Federal agencies to cover the cost of services provided. The maximum amount transferred, limited by the amount approved by the Commissioner, is the actual cost of such services for the year . . . .[12]

Necessarily, the entitlement of a local school district may be paid in two parts. The first part would be in the

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[11] Ibid., 6-9.

[12] Ibid., 9.

form of a cash payment to the local education agency. The second part would be in the form of a payment in behalf of the local education agency to the Federal agency providing the services.

In its first year of operation, P. L. 81-874 provided financial assistance for 1,172 school districts with 512,000 federally connected children in average daily attendance, at a cost of $29.6 million. The total average daily attendance of these districts was 2.9 million; the average per pupil cost was $176.76; and total current expenses amounted to more than half a billion dollars. The average local contribution was $106.82. In every one of the years of the program's existence, there has been an increase in all items of program activity, with the exception of the number of applications filed. "Slightly smaller numbers since 1963 reflect the many consolidations and reorganizations which have taken place rather than a reduction in districts eligible for assistance."[13]

In fiscal year 1968, there were 4,236 eligible school districts having in excess of 22 million pupils in average daily attendance, of whom 2.6 million were federally connected. Total program costs were $493.8 million while total current operating expenses were $11 billion in these districts. The average per pupil expenditure was $534.56 and the average local contribution was $317.10. "This growth is attributable to increases in school population, increases in school expenditures per pupil, broadened interest in the program by State

[13] Ibid., 1.

and local officials, expanded Federal activity, and amendments liberalizing the basic legislation."[14]

Examples of such liberalizing amendments are stated in the following:

> . . . P. L. 83-248 broadened the definition of Federal property and extended the 3(a) category to include children of parents in the uniformed services; P. L. 84-949 again expanded the definition of Federal property and extended the 3(b) category to include children of members of the Armed Forces (now "uniformed services"); P. L. 85-620 changed the definition of "child" to include Indian children; P. L. 85-313 standardized the 3-percent eligibility requirement for all school districts; P. L. 89-750 introduced the alternative minimum of 400 for section 3 ADA, broadened further the definition of Federal property, extended coverage to additional federally connected children, and revised the basis for deducting "other Federal payments" from gross entitlements; and P. L. 90-247 repealed the deduction provision.[15]

Similarly, some amendments have resulted in substantially increasing the average rate of payment under Section 3. Among these amendments were P. L. 83-248, which established one-half the state average per pupil expenditure in the second preceding year as the minimum rate of payment, and P. L. 85-620, which set as a second minimum rate one-half the national average per pupil expenditure of the same year.[16]

Public Law 81-815 -- Legislative Provisions and Method of Allocation

Public law 81-815 authorizes payments to assist local school districts in the construction of school facilities in

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[14] Ibid., 13.

[15] Ibid.

[16] Ibid.

areas where enrollments are increased by Federal activities. Financial assistance is authorized to eligible school districts which provide free public education for children who live on Federal property with a parent employed on Federal property -- Section 5(a)(1). Such assistance is in the form of grants to aid in the financing of minimum school facilities.

Under Section 10, the Commissioner of Education is required to provide, by direct Federal construction, school facilities for children residing on Federal property where no state or local education agency is able, because of state law or for other specified reasons, to provide suitable free public education for such children. Funds also are provided, under Section 14, to school districts which provide free public education for substantial numbers of children who reside on Indian lands.

Other provisions of P. L. 81-815 are briefly described as follows: (1) Where a local education agency is unable to provide minimum school facilities for the increased number of federally connected children through utilization of funds from all state and local sources, and from the maximum Section 5 grant, the Commissioner of Education is authorized to make an additional grant under Section 8, within specified limitations, to construct such facilities. (2) When it is determined that an increase in federally connected membership may be of a temporary duration, due to the nature of some Federal activities, a local education agency may request the construction of temporary facilities under Section 9. (3) Section 16 refers to school construction assistance in replacing

or restoring school facilities destroyed or seriously damaged as a result of a major disaster, as defined by the Director of the Office of Emergency Planning.[17]

In brief, then, P. L. 81-815 includes two sets of provisions through which Federal financial assistance may be granted to local school districts. Sections 5 and 9 of the Act authorize grants which are based on enrollment increases in federally connected pupils (under Section 9 only if the increase is expected to be of a temporary duration). Section 14 authorizes grants based on numbers of children who reside on Indian lands and for whom local school districts are unable to provide minimum school facilities.

Amendments to the Act (Public Law 89-750 and Public Law 90-247) increased entitlements under the program to a projected average of $80 million a year when all provisions are in effect. This projection includes an estimate of $34.6 million a year for the permanent provisions -- Section 5(a)(1), Section 10, and Section 14. Amendments affecting grants to local school districts under sections 5, 8, 9 and 14 include: (1) extending the application period for four years; (2) reducing the percentage of increase in federally connected membership necessary to qualify; (3) permitting unhoused membership (children for whom there is no classroom space available based on their state standard for occupancy) to be extended to the second year beyond the increase period; (4) liberalizing the eligibility requirements and providing minimum school facilities for all children, where necessary, in school districts

[17] Ibid., 15.

comprised primarily of Indian lands; and (5) liberalizing the general concept of "minimum school facilities."[18]

As provided in the Act, the Commissioner of Education must reserve or commit from each fiscal year's appropriation sufficient sums to cover the anticipated cost of constructing facilities under sections 9 and 10 for direct Federal construction. The remainder of the appropriation is then available to fund eligible applications under the other sections (5, 8, and 14) of P. L. 81-815. Under Section 5, the maximum allowable grant is determined by:

> . . . multiplying the number of federally connected children to be counted for payment under subsection 5(a)(1) by 95 percent of the average per-pupil cost of constructing minimum school facilities in the applicant's State during the 2d year of the 4-year increase period designated in the application; these to be counted under subsection 5(a)(3) by 45 percent.
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> The amount is further limited to the actual cost of constructing minimum school facilities in the applicant's school district for children who would otherwise be without facilities.[19]

Under the provisions of Section 8, a grant may not exceed the difference between (1) the actual cost of providing minimum school facilities for the federally connected pupils qualifying for payment, or the average cost in the state of providing such facilities, whichever is lower, and (2) the Federal funds which have been made available to the applicant through Section 5, plus local and state funds which may be available for such purpose.

Section 14 funds are provided to eligible districts in an amount limited to that required, in excess of local, state

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[18] Ibid.

[19] Ibid., 16.

and/or other Federal funds available, for the construction of needed minimum school facilities for (1) all children estimated to be in membership in the applicant's schools at the end of any four year membership period -- Section 14(a) or (2) only those children who reside on Indian lands -- Section 14(b). Under sections 9 and 10, funds are provided in an amount equal to the amount necessary for the construction, within the limitations set forth in these sections.[20]

P. L. 81-815 funds are obligated in different ways for the two types of projects funded -- Federal and non-Federal. The Office of Education considers a grant to a local education agency, a non-Federal project, to be an obligation upon issuance of notice of tentative reservation of funds. This is usually four months after the application is received. Funds are committed (set aside) for a project on Federal property, a Federal project, when the cost estimate is approved. However, obligations begin only when contracts are executed (about a year after an application is received). As a result of this type of project commitment and obligation procedure, funds for non-Federal projects may be obligated relatively quickly and are not usually carried forward as unobligated from one fiscal year to the next. On the other hand, sizable balances will be committed for Federal projects, under Section 10, which are technically unobligated. Thus, at the beginning of a fiscal year, a substantial balance may be reported as unobligated. However, a substantial portion of the

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[20] Ibid., 16-19.

balance may be committed to school construction projects on Federal property.

National Defense Education Act (NDEA) -- Public Law 85-864, Title III and V-A

According to a letter from the acting Secretary of Health, Education, and Welfare, Elliott L. Richardson, to Chairman Barden of the House Committee on Education and Labor, May 1, 1958, the administration still recognized "a serious shortage in school housing which adversely affects the quality of education." Conversely, it was believed that local and state construction programs were "keeping abreast of the rapid increase in enrollments" and making slow progress in meeting the backlog of need. In addition, there was good reason to give serious attention to "other needs and deficiencies in our educational system" which were "brought into sharp focus" by "events of the past year."[21]

In the fall of 1957, the Soviet Union put Sputnik into orbit, and, in doing so, gave considerable emphasis to the great social, scientific, and technological changes going on in the world. In this regard, the following has been stated:

> The whole of the twentieth century has been an era of scientific and technological advancement stretching from relativity physics in the early part of the century to atomic energy, rockets, synthetic medicines, and computers in the middle of the century. Political and social problems may, from time to time, have dulled the public's appreciation of the growth of science and technology, but nevertheless there is a general understanding that science is rapidly changing

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[21] 85th Cong., 2d Sess., House Committee on Education and Labor, Federal Grants to States for Education (Washington, D.C.: U.S. Government Printing Office, 1958), 252.

> our ways of thinking and living. Sputnik was but a dramatic affirmation of the role of science, an affirmation which included political and social overtones, for Sputnik had been sent aloft not by American scientists but by Soviet scientists.[22]

Political, social, and technological events of the kind indicated above brought about a critical examination of the ability of the nation's public schools to cope with a pressing need for trained manpower, especially in technical and scientific areas. At a time, during the 1950's, when the number of public secondary schools was increasing at an unprecedented rate, and the labor market was purportedly short of technicians, mathematicians, engineers, scientists, and linguists, "more than half of the students of superior ability were not entering college and almost three-quarters of those entering college were not graduating."[23]

Through the 1958 enactment of Public Law 85-864, the National Defense Education Act, the Congress responded to critics of American education who suggested that the relatively small supply of scientists and lack of technological capability posed a threat to the national defense. Congressional intent in the enactment of NDEA is stated well in the Report of the House Committee on Education and Labor (H. R. Report No. 2157) in recommending passage of the legislation:

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[22]Sidney C. Sufrin, Administering the National Defense Education Act (Syracuse, N. Y.: Syracuse University Press, 1962), 1.

[23]U.S. Department of Health, Education, and Welfare. Office of Education, Review of Progress under Title V-A, NDEA (Washington, D.C.: U.S. Government Printing Office, 1969), 2.

There is no question as to the need for strengthening and expanding the teaching of mathematics, science, and modern foreign languages in our elementary and secondary schools. The vital importance of these subjects to our national defense and to the conduct of our foreign economic, cultural, and diplomatic relations is inescapable. Instruction in these subjects--utilizing modern techniques and equipment--must be adequate at the elementary and secondary school level if we are to produce the educated people our Nation needs in the years ahead. The plain cold fact is that these subjects are neglected ones in all too many of our schools today.

Subcommittee hearings revealed during recent years most school districts throughout the country have been pressed with problems caused by increased enrollments, such as financing new construction and obtaining sufficient teaching personnel. As a result needs for adequate laboratory facilities, equipment and other teaching aids have been neglected. This, of course, has in many instances interfered with effective teaching in science, mathematics, and foreign languages.

There is need for modern laboratory equipment including audio-visual materials and equipment such as motion pictures, slides, filmstrips, transparencies, disk and tape recordings, still pictures, . . . if instruction and learning is to be improved.

Although there have been slight increases recently in the number of pupils studying science, analyses of program trends indicate a decreasing emphasis on laboratory experimentation by pupils. Steps must be taken to reverse this trend if theory and new knowledge is to be related to practice.

A survey for the school year 1957-58 revealed that only 60 high schools have electronic laboratory equipment for drill in hearing and speaking the foreign languages offered. Such equipment should be as much a part of a good high school as the typing room, machine shop, or home economics room. An essential objective in foreign languages study is a high level of competence in understanding the spoken language and in speaking. The conventional classroom does not provide adequately for the systematic oral practice which is indispensable in learning to speak a second language. Schools which have used electronic equipment for developing aural-oral skills report unanimously and enthusiastically in favor of the language laboratory.[24]

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[24]As quoted in U.S. Department of Health, Education, and Welfare. Office of Education, NDEA Title III, A Management View (Washington, D.C.: U.S. Government Printing Office, February, 1969), 4-5.

Initially, Title III of NDEA was designed to provide financial assistance for strengthening instruction in science, mathematics, and modern foreign languages. Subsequent amendments, beginning in 1964, have included assistance for history, civics, geography, English, reading, economics, and industrial arts.[25]

Title V-A provided a program for strengthening guidance, counseling, and testing to identify and encourage able students. Initially, Title V-A assistance was confined to secondary schools, but "to more fully identify and develop needed talents for an expanding economy, and to achieve the goal of maximum development of each individual, counseling services were needed below and beyond the secondary level." In response to these needs, 1964 amendments extended the counseling and guidance provisions to public elementary schools and to public junior colleges and technical institutes. Amendments in 1968 provided support for short-term training for guidance and counseling personnel.[26]

NDEA Title III -- Legislative Provisions and Methods of Allocation

When enacted, the primary objectives of Title III were: (1) to financially assist in the purchase of laboratory and other special equipment and materials, as well as the cost of minor remodeling of facilities to allow installation of equipment for elementary and secondary instruction in science,

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[25] Ibid., 3.

[26] U.S. Dept. of Health, . . . , Review of Progress . . . , 2.

mathematics, and modern foreign languages; and (2) to strengthen the leadership capacity of state education agencies for improving instruction in these subject areas. Up to 50 percent of the costs of state education agency staff improvement and the costs of equipment, materials, and minor remodeling were provided through Title III. The remaining funds were contributed by state and local education agencies.[27]

According to an Office of Education report, Congress intended the improvement of instruction -- through NDEA Title III support for equipment and minor remodeling -- to take place in a number of ways. These include: (1) increasing enrollments in science, mathematics, and modern foreign languages; (2) increasing the number of advanced courses in these three subject areas; (3) increasing the number of laboratories for science and modern foreign language instruction; (4) changing instructional methods in teaching foreign languages to improve speaking skills; and (5) emphasizing laboratory practices in teaching science.

Also, through NDEA Title III support, state education agencies were encouraged to employ additional specialists in the three subject areas in order to provide state leadership to local education agencies for (1) developing and up-dating curriculum; (2) planning appropriate course sequences for elementary grades through high school; (3) assisting in the selection of high quality equipment and materials; (4) providing demonstrations of new equipment and materials;

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[27]U.S. Dept. of Health, . . . , NDEA Title III, A Management View, 5.

(5) conducting workshops and conferences to orient teachers and other school personnel to new methods, equipment, and materials; and (6) preparing publications and other media for disseminating information to teachers and other school staff about new developments in the three subject areas.[28]

Some of the immediate results of the Title III program having significance for other curricular areas were reported as follows:

> Soon after Title III was put into operation, the improvement of equipment, materials, and State supervisory services began to make a constructive improvement on instruction in the three subjects. Educators and Members of Congress then recognized that other subjects in the curriculum needed similar attention. Reading and writing skills, for example, were not believed to be meeting acceptable standards. Similarly, Congress was concerned that students were insufficiently familiar with historical events, with the American form of government, and with characteristics of the earth. As a result, in 1964 Congress amended the NDEA and extended support -- under Title III (P. L. 88-665) -- to five additional subjects: history, civics, geography, English, and reading.
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> In 1965, as part of the Higher Education Act (P. L. 89-329), Congress extended assistance to instruction in economics. A 10th subject, industrial arts, was added as a part of the Higher Education Amendments of 1966 (P. L. 89-752).[29]

Title III of NDEA was further amended through the Higher Education amendments of 1968 (P. L. 90-575). Assistance is now authorized for the special educational needs of educationally deprived children in school attendance areas having a high concentration of children from low-income families. "By providing support for the seven additional

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[28] Ibid., 5-7.

[29] Ibid., 6-7.

subjects and for the special needs of educationally deprived children, Congress showed that its intent is broader than was indicated in NDEA as originally enacted -- although funds to implement this 1968 amendment were not appropriated."[30]

In funding NDEA Title III, each state receives an allocation for administration of the program, including salaries and expenses of state Title III staff, on the basis of the state's proportion of the school age population in the nation, with a stipulation that each state must be allocated at least $50,000. A separate formula is used to determine state allocations for distribution to local education agencies in support of approved projects involving equipment, materials, and minor remodeling. Funds appropriated for such distribution are allocated among the states on the basis of the relative school age population of the states, weighted by their relative personal incomes per school age child. For example, if the personal income per school age child in state "A" is 10 percent higher than the personal income per school age child in state "B", then state "A's" allocation per school age child will be 10 percent lower than that of state "B". However, the weight which may be given to personal income per school age child is so limited as to insure that no state will receive more than twice as much per school age child as the state receiving the smallest amount per school age child. In other words, "a high school-age population would tend to increase a State's allotment for equipment and materials,

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[30] Ibid., 7.

whereas a high per capita income would tend to decrease its allotment."[31]

Other than a "small portion" set aside for use in state-supported schools, most of a state's Title III funds for equipment, materials, and minor remodeling are distributed by the state education agency to local education agencies for specific projects. It is the reponsibility of the state agency to determine local agency eligibility and to establish state funding priorities. Although Federal funds cannot exceed 50 percent of the cost of a project, the required matching funds may be provided by either the state or the local education agency. Each state establishes its own criteria for the state-local matching procedure.

There was overmatching of Federal funds by state and local education agencies in each year except fiscal 1959. The amount overmatched increased from 3.6 percent of the Federal expenditures in 1960 to 33.6 percent in 1967. The total amount of overmatching during this period was $4.12 million, or 14.2 percent of the total expenditure under Title III. Nevertheless, not all states made full use of their allotments, as evidenced by the following:

> Although some States overmatched, others did not fully use their allotments. The annual amount of unused Title III appropriations varied from $555,000 in fiscal 1959 to $1.8 million in fiscal 1967. One reason for the large amount of unused allotment . . . is the uncertainty of Federal funding. Often when the States are unsure of their allotments for personnel and services, they

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[31] Ibid., 8.

> are reluctant to provide the matching funds. This is particularly true for personnel salaries which States could not wholly finance without Federal funding.[32]

In summary, state education agencies have administered the Title III program through their own state plans, in accordance with statutory authority set forth in the legislation. The Act originally stated in part:

> . . . funds paid to the State from its allotment under section 302(a) will be expended solely for projects approved by the State educational agency for (A) acquisition of laboratory and other special equipment, including audiovisual materials and equipment, and printed materials (other than textbooks), suitable for use in providing education in science, mathematics, or modern foreign language . . . .[33]

In regard to the administration of the program, certain procedures were included in the Act which required the states to (1) set up a system of priorities to be applied when approving projects; (2) establish standards for laboratory and other special equipment acquired; and (3) set up a program for the expansion or improvement of supervisory or related services. The U.S. Office of Education provided interpretations of these requirements and developed guidelines to assist the states; however, each state is responsible for administering its own program. Consequently, the program differs from state to state according to varying aims and emphases. "A major variable in the administration of the Title III program concerns State-local relationships

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[32] Ibid., 9.

[33] As quoted in ibid., 8.

which are determined by the philosophy and method of operation of the State Education Agency."[34]

NDEA Title V-A -- Legislative Provisions and Method of Allocation

Under present authority, the legislative intent of NDEA Title V-A, as stated in Section 503(a) of the Act, is to provide funds through an approved state plan for:

> (1) a program for testing students in the public elementary and secondary schools of such State or in the public junior colleges and technical institutes of such States, and if authorized by law, in other elementary and secondary schools and in other junior colleges and technical institutes in such State, to identify students with outstanding aptitudes and ability, and the means of testing which will be utilized in carrying out such program; and (2) a program of guidance and counseling at the appropriate levels in public elementary and secondary schools or public junior colleges and technical institutes of such State (A) to advise students of courses of study best suited to their ability, aptitudes, and skills, (B) to advise students in their decisions as to the type of educational program they should pursue, the vocation they should train for and enter, and the job opportunities in the various fields, and (C) to encourage students with outstanding aptitudes and ability to complete their secondary education, take the necessary courses for admission to institutions of higher education, and enter such institutions.[35]

In reviewing the progress of Title V-A in satisfying congressional intent, the U.S. Office of Education reports:

> The intent of Title V-A was explained further in a summary and analysis of the Act prepared by the staff of the Committee on Labor and Public Welfare, U.S. Senate, September 5, 1958. It states "The purpose of this Title is to enable

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[34] Ibid., 16-17.

[35] As quoted in U.S. Dept. of Health . . . , Review of Progress . . . , 7-8.

> the States to establish, maintain, and improve programs of testing, counseling, and guidance in secondary schools to discover the latent talents or special aptitudes of high school students . . . ." The significance of this statement is its emphasis on the improvement aspects of the program, recognizing that all students have talents, albeit of varying degrees, which should be identified and developed.
>
> As indicated by the above statement as well as by Regulations pertaining to the Act, "identification and encouragement of able students" was not meant to be a categorical distinction. Congress recognized that all students in public elementary and secondary schools as well as junior colleges and technical institutes have abilities in varying degrees and that they may be more able in certain academic areas than in others. It is necessary, therefore, to identify every individual's abilities and through guidance and counseling programs, to encourage and assist in the fullest possible development of every student's potential.[36]

For fiscal year 1969, the Title V-A appropriation was $17 million, a reduction from $24.5 million for fiscal 1968. Up to 3 percent of the annual appropriation is reserved for allocation among American Samoa, Guam, Puerto Rico, the Virgin Islands, the Trust Territory of the Pacific Islands, and the Canal Zone. Funds also may be provided to the Department of Defense and the Department of the Interior. Remaining funds are allocated to the fifty states and the District of Columbia under a formula based on the state's relative school age population. The minimum state allocation for Title V-A is $50,000.[37]

To obtain their allocations, state education agencies submit plans for approval by the U.S. Commissioner of Education.

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[36] As reported and quoted in ibid., 8-9.

[37] U.S. Office of Education, Bureau of Elementary and Secondary Education Programs (Washington, D.C.: U.S. Government Printing Office, March, 1969), 24.

These plans describe the state's program of guidance, counseling, and testing. Also, the plans must provide assurance that the intent of the legislation will be carried out. Local school districts, junior colleges, and technical institutes apply to their state education agency for funds, as specified in the approved state plan. Federal funds must be matched dollar-for-dollar by state and local funds.[38]

Vocational Education Act of 1963 -- P. L. 88-210

Vocational education serves as a principal means of contributing to the social and economic welfare of the United States. In recent years, vocational education legislation has attempted to extend and broaden opportunities for the preparation of all persons for gainful employment. "One of the prime motivations behind such legislation has been the alleviation of the high rate of unemployment among our youth -- especially our disadvantaged youth."[39]

On February 20, 1964, President John F. Kennedy directed the Secretary of Health, Education, and Welfare to convene an advisory body drawn from the educational profession, labor, industry, and agriculture, as well as the lay public, together with representatives from the Departments of Agriculture and Labor. This Panel of Consultants was charged with the responsibility of reviewing and evaluating vocational education acts

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[38] Ibid., 25.

[39] U.S. Department of Health, Education, and Welfare. Office of Education, Vocational and Technical Education Annual Report Fiscal Year 1967 (Washington, D.C.: U.S. Government Printing Office, May, 1969), 2.

and making recommendations for improving and redirecting the programs. The Panel began its work on November 9, 1961, and concluded its work on November 7, 1962. It reviewed and analyzed the Federal vocational education legislation and the programs of the states, making a special study of six representative states involving 3,733 public high schools. The report of the Panel (published under the title Education for a Changing World of Work) was used extensively by the House Committee in its deliberations on the legislation resulting in the Vocational Education Act of 1963.

The Panel of Consultants recommended that vocational education must (1) offer training opportunities to the 21 million noncollege graduates who would enter the labor market in the 1960's; (2) provide training or retraining for the millions of workers whose skills and technical knowledge must be updated as well as those whose jobs will disappear due to increasing inefficiency, automation, or economic change; (3) meet the critical need for highly skilled craftsmen and technicians through education during and after the high school years; (4) expand vocational and technical programs consistent with employment possibilities and national economic needs; and (5) make educational opportunities equally available to all regardless of race, sex, scholastic aptitude, or place of residence.

The Panel further recommended that the local-state-Federal partnership increase support for (1) high school students preparing to enter the labor market or become homemakers; (2) youth with special needs who have academic,

socioeconomic, or other handicaps that can prevent them from succeeding in the usual high school vocational program; (3) youths or adults who have completed or left high school and are preparing themselves to enter the labor market; (4) youth and adults unemployed or at work who need training or retraining to achieve employment stability; and (5) adequate services and facilities to assure quality in all vocational and technical programs.[40]

Congressional intent and efforts to design legislation for improving vocational education programs in 1963 seem to have been strongly influenced by the report and recommendations of the Panel of Consultants. This is evident in the following excerpt from the remarks of Congressman Carl D. Perkins of Kentucky, on the floor of the House, as he introduced the bill which eventually resulted in the Vocational Education Act of 1963. Congressman Perkins stated:

> Mr. Speaker, I am today introducing a bill to strengthen and improve the quality of vocational education and to expand vocational education opportunities for the people of this Nation.
>
> Cited as the Vocational Education Act of 1963, this legislation embodies the recommendations of the Panel of Consultants on Vocational Education, an advisory group appointed in late 1961 at the request of President Kennedy. The panel was charged by the President to review and evaluate the current National Vocational Education Acts and make recommendations for improving and redirecting the program.
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> Mr. Speaker, in drafting this bill I have had the benefit of the recommendations of the Panel of Consultants . . . . I believe that this bill is in keeping with the needs of the

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[40]From information reported in 88th Cong., 1st Sess., House Report (House Education and Labor Committee) No. 393, June 18, 1963 (To accompany H. R. 4955).

> day as seen by the Panel of Consultants as well as by vocational educators.
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> In the 1960's it is estimated that 8 out of 10 of the youngsters now in elementary school must receive preparation for occupations other than the professional occupations which require 4 or more years of college. Mr. Speaker, this fact challenges our vision and imagination as never before. Especially is this true in view of the fact that the number of unskilled jobs is rapidly decreasing. More and more of the work of the world is demanding highly skilled and well-trained individuals. If our public schools are to underwrite this challenge, we must provide more and improved opportunities for our students through vocational education . . . .[41]

In short, the Vocational Education Act of 1963 has been described as having instituted legislative changes that emphasized a redirection of programs of preparation for employment. That is, the legislation redirected vocational education programs from preparation for specific occupations to any occupation not requiring a baccalaureate degree. In addition, considerable emphasis was placed upon the initiation of programs designed for persons with special needs. These kinds of changes have been summarized as follows:

> The Vocational Education Act of 1963 set a new pattern for Federal support of vocational and technical education. It continued the previously authorized training in specified occupational categories, added the office occupations, and also permitted States, at their option, to transfer Federal funds from one allotment to another. Moreover, the 1963 act offered States additional funds for the training of specified population groups, regardless of the occupational objectives of the training. Population groups named in the Act are secondary school youth, postsecondary

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[41] 88th Cong., 1st Sess., 109 Congressional Record (1963), 4444, 4445.

youths, and adults enrolled in full-time instruction as well as youths and adults enrolled in part-time programs, and people with special needs.[42]

Vocational Education Act -- Legislative Provisions and Method of Allocation

Part B of the Vocational Education Act of 1963 authorizes grants to states to assist them in making vocational education programs available to persons of all ages throughout the country. The Act specifies that the Commissioner of Education must reserve an amount not to exceed $5 million for transfer to the Secretary of Labor to finance various studies and projections of manpower needs -- Section 103(a). From the remaining funds, 90 percent is authorized for basic grants to states for vocational programs under Part B and 10 percent for research and training under Part C.

The basic grants provision, which requires state matching of funds on a dollar-for-dollar basis, assists in the support of vocational and technical education through formula allocations to the states. These funds may be used to help pay the costs incurred by state and local education agencies in providing vocational-technical programs, including (1) salaries of teachers, supervisors, counselors, and administrative personnel; (2) training of teachers; (3) construction of facilities; (4) purchase of materials and equipment; (5) curriculum development; (6) research and evaluation; and (7) administrative costs of state agencies.

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[42]U.S. Dept. of Health . . . , Vocational and Technical Education, 2.

The rather complex formula used in allocating funds to the states is found in Section 103 of the Act, which states in part:

> (2) The . . . sums appropriated pursuant to section 102(b) shall be allotted among the States on the basis of the number of persons in the various age groups needing vocational education and the per capita income in the respective States as follows: The Commissioner shall allot to each State for each fiscal year--
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> (A) An amount which bears the same ratio to 50 per centum of the sums being allotted, as the product of the population aged fifteen to nineteen, inclusive, in the State in the preceding fiscal year and the State's allotment ratio bears to the sum of the corresponding products for all the States; plus
>
> (B) An amount which bears the same ratio to 20 per centum of the sums being allotted, as the product of the population aged twenty to twenty-four, inclusive, in the State in the preceding fiscal year and the State's allotment ratio bears to the sum of the corresponding products for all the States; plus
>
> (C) An amount which bears the same ratio to 15 per centum of the sums being allotted, as the product of the population aged twenty-five to sixty-five, inclusive, in the State in the preceding fiscal year and the State's allotment ratio bears to the sum of the corresponding products for all the States; plus
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> (D) An amount which bears the same ratio to 5 per centum of the sums being allotted, as the sum of the amounts allotted to the State under subparagraphs (A), (B), and (C) for such years bears to the sum of the amounts allotted to all the States under paragraphs (A), (B), and (C) for such year.
>
> (b) The amount of any State's allotment under subsection (a) for fiscal year which is less than $10,000 shall be increased to that amount, the total of the increases thereby required being derived by proportionately reducing the allotments to each of the remaining States under such subsection, but with such adjustments as may be necessary to prevent the allotment of any of such remaining States from being reduced to less than that amount.

> (c) The amount of any State's allotment under subsection (a) for any fiscal year which the Commissioner determines will not be required for such fiscal year for carrying out the program for which such amount has been allotted shall be available, . . . for reallotment . . . first among programs authorized by other parts of this title within that State and then among other States, . . .
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> (d)(1) The allotment ratio for any State shall be 1.00 less the product of--
>
> (A) 0.50, and
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> (B) the quotient obtained by dividing the per capita income for the State by the per capita income for all the States . . . , except that . . . the allotment ratio in no case shall be more than 0.60 or less than 0.40, . . .
>
> (2) The allotment ratios shall be promulgated by the Commissioner each fiscal year between July 1 and September 30 of the preceding fiscal year. Allotment ratios shall be computed on the basis of the average of the appropriate per capita incomes for the three most recent consecutive fiscal years for which satisfactory data are available.
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> (3) The term "per capita income" means, . . . the total personal income . . . divided by the population of the area concerned in such year.[43]

State Advisory Councils must be established prior to the beginning of the fiscal year in which a state intends to participate in Federal vocational education programs. During the year they advise their respective State Boards of Vocational Education on the administration of State Plans. Additional activities of the Advisory Councils include: (1) evaluating vocational education programs, services, and activities; (2) publishing and distributing the results of their evaluations; and (3) preparing and submitting a report to the U.S. Commissioner of Education and the National Advisory Council on Vocational Education. This report is concerned with the

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[43](20 U.S.C. 1243) Enacted Oct. 16, 1968, P. L. 90-576, sec. 101, 82 Stat. 1065.

evaluation of programs and services provided during the year and recommendations for such changes as may be warranted.

Five years after the Vocational Education Act of 1963, the Vocational Education Amendments of 1968 (based in part on a National Advisory Council review of the 1963 Act) took additional steps toward redirecting vocational education programs. These amendments merged all the legislation into one act and replaced "all occupational-oriented categories with 'people-oriented' ones." This more recent legislation is believed to affect two million people a year. "It provides great flexibility in programs . . . allowing . . . vocational educators to no longer feel constrained by preconceived molds."[44]

According to Grant Venn, Associate Commissioner for adult and vocational programs, "The amendments can be characterized as a charter for important changes in emphasis for American education." In commenting further about the intent of the 1968 amendments, Venn stated:

> The 1968 Act is designed to assist the educational community in breaking down the barriers between the academic, general, and vocational programs so that no young person will be denied an opportunity to prepare for work suited to his talents as an individual. His education must provide a foundation which will not crumble beneath him when he shifts jobs in the fast changing tempo of American economy.[45]

Of importance, the 1968 amendments more than doubled the previous authorization for Federal aid to vocational

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[44]National School Public Relations Association, Federal Aid: New Directions for Education in 1969-70 (Washington, D.C.: the Association, 1969), 5-6.

[45]As quoted in ibid., 4.

education. The funds for general state programs are distributed among the states under the same formula as the 1963 Act, on a 50 percent matching basis. As cited previously, these allocations are made from a fiscal year's appropriation after $5 million is subtracted for a study of local, state, regional, and national manpower needs. Such studies are conducted by the Department of Labor. In addition, the amendments authorize $40 million for special programs for the disadvantaged which may be funded up to 100 percent in Federal money.

Elementary and Secondary Education Act of 1965 (ESEA) -- Public Law 89-10, Titles I, II, III, V, and VI-A

The Elementary and Secondary Education Act of 1965 (ESEA) has been called the first major legislation of national significance to have been enacted by the 89th Congress. In addition, ESEA frequently has been referred to as the greatest legislative commitment of the Federal government to the financing of elementary and secondary education.

On January 12, 1965, President Lyndon B. Johnson sent to the Congress his education message. On the same day, companion bills S. 370 and H. R. 2362 were introduced in the Senate and House. Hearings before the Education Subcommittee of the Senate Committee on Labor and Public Welfare on S. 370 were held on January 26 and 29 and February 1, 2, 4, 8, and 11, 1965. During the course of these hearings, extensive testimony was taken about the bill from a variety of witnesses representing a wide cross-section of interested

and/or concerned Americans. Six printed volumes totaling 3,287 pages indicate the scope and depth of the consideration given to the legislation.

H. R. 2362 was reported March 8, 1965, by the House Committee on Education and Labor. On March 26, it passed the House by a rollcall vote of 263 to 153. The Education Subcommittee of the Senate Committee on Labor and Public Welfare met on March 30, 1965, at which time S. 370 was laid aside in favor of H. R. 2362. Additional executive sessions were held on March 31 and April 1, 1965. At the conclusion of these sessions, the bill was reported to the full committee without amendment.[46]

President Johnson expressed his view of the purpose of the legislation in a statement issued on April 1, 1965, the same day the bill was reported by the Senate subcommittee to the full committee. He said:

> This bill has a simple purpose: To improve the education of young Americans.
>
> It will help them master the mysteries of their world -- enrich their minds -- and learn the skills of work.
>
> And these tools can open the world to them.
>
> With education, instead of being condemned to poverty and idleness, young Americans can learn skills to find a job and provide for a family. Instead of boredom and frustration they can find excitement and pleasure in their hours of rest. Instead of squandering and wasting their talents they can learn to use them to benefit themselves and the country they live in . . . .
>
> This bill represents a national determination that . . . poverty will no longer be a barrier to learning, and learning shall offer

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[46] 89th Cong., 1st Sess., Senate Report (Labor and Public Welfare Committee) No. 146, April 6, 1965 (To accompany H. R. 2362), 2-3.

> an escape from poverty. We will neither dissipate the skills of our young people, nor deny them the fullness of a life informed by knowledge. And we will liberate each young mind -- in every part of this land -- to reach the furthest limit of thought and imagination. . . .[47]

Yet, to more fully understand the origin, rationale, and legislative intent of ESEA, it is necessary to review some of the previously mentioned legislative activity and expressions of views by proponents of the legislation prior to the time of the President's statement and the report of the Education Subcommittee of the Senate to the full Committee on Labor and Public Welfare. The following statement by Senator Wayne G. Morse of Oregon provides some insight into the background of ESEA:

> Last year my subcommittee had a brainstorm. We were working on impacted areas legislation. I felt that we needed a new section to this impacted area legislation to provide Federal funds for another type of impact -- namely the impact of poverty and deprivation upon youngsters in the low-standard school districts of the country and in rural and urban slums. We talked about it for quite a while as an amendment to the impacted area legislation. Finally we introduced a separate bill.
>
> We didn't think that we had a chance of getting it passed last year, but we felt we could get some hearings. That's how the Morse Bill of last year came into being. Unless you understand this . . . you can't possibly understand . . . (Public Law 89-10).[48]

Similarly, in his 1965 comments to the American Association of School Administrators, after the enactment of ESEA, Senator Morse emphasized the importance of the previous

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[47]Quoted in ibid., 4.

[48]Quoted in School Management, June, 1965, 87.

year's unsuccessful attempt to pass legislation of this kind.

He stated:

> I will never forget those hearings last summer. To my astonishment the Administration, speaking through the mouth of the Commissioner of Education, pleaded against the enactment on the grounds that there would be administrative difficulties in working out the formula provided.
>
> Now, I conduct my hearings in the form of a seminar, with term papers assigned to the Administration witness. So I told the Commissioner, more in sorrow than in anger, that, in my judgment, he had flunked the course. And I made him my emissary to the Administration to tell it, all the way to the top, that they had failed it, too. But I held out hope. I told the Commissioner that he could repeat the course for make-up credit in this session.
>
> Last fall during the signing of the Powell-Morse-Perkins National Defense Education Act Amendments of 1964 (Public Law 88-665), the Commissioner came over to me and said, "Senator, the President wants us to tell you that we are for your bill. We are even going to expand it. We don't know by how much, but we are going to expand it."
>
> The rest is history. Instead of my little $218 million a year bill, they took me at my word and increased it five fold, when they sent up S. 370 and H. R. 2362 (ESEA). When we talked with the HEW people and the Office of Education people about their bill prior to its introduction last January, we had a great deal of fun with them, pointing out how much time and effort they could have saved themselves. But seriously, the key point consisted in finding a formula which was (1) objective, (2) verifiable from independent, sources without too great an investment in personnel, and (3) most importantly, which was based on forerunner legislation which was known to Congress, so that the strawmen such as the myth of Federal control could be laid to rest. This helped us to build a bridge across the chasm which had swallowed up every Federal aid bill since 1947.[49]

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[49]As quoted in Stephen K. Bailey and Edith K. Mosher, ESEA The Office of Education Administers a Law (Syracuse, N.Y.: Syracuse University Press, 1968), 28.

As indicated previously, extensive congressional hearings were conducted about the proposed legislation (H. R. 2362 and S. 370). One of the most effective and articulate expressions in support of ESEA would appear to be that of the U.S. Commissioner of Education, Francis Keppel, before the Senate Subcommittee on Education. Including his prepared statement, supporting documents and publications, and answers to questions from members of the subcommittee, the report of Keppel's appearance before the subcommittee on January 26, 1965, spans nearly 300 pages.[50]

In his statement to the subcommittee, Keppel suggested that the "administration's extraordinary commitment to education can be seen, in large part, in . . . S. 370." This commitment can be "measured, in part, in terms of money, in the expansion of Federal support for American education." The major increase in the projected new funds would be made for programs within the Office of Education. In fiscal year 1966, the President's budget request for Office of Education programs, including the proposed $1.5 billion program, amounted to "about $3.4 billion -- nearly five times the amount of 2 years ago."[51]

The Commissioner then proceeded to provide an analysis and justification of the bill. Following are excerpts from his statement concerning Title I:

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[50]U.S. Congress, Senate, Committee on Education and Labor, Elementary and Secondary Education Act of 1965, Hearings before the Subcommittee on Education, on S. 370, 89th Cong., 1st Sess., 1965, 629-905.

[51]Ibid., 630.

> . . . let us examine the new ingredients, beginning with proposals for elementary and secondary education. Here the President calls for new expenditures of more than $1.2 billion -- about five-sixths of the new funds he has called for. Of this expenditure, $1 billion is specifically directed to the education of children of low-income families -- to the 5 million (out of a total of 48 million) school-age children in families whose annual incomes are less than $2,000.
>
> To improve the education of these children is the first goal of the President's program. His approach is not to take on all the problems of American education, but to take on the most serious problems first -- and to meet them not with token methods but with sufficient leverage to make a real difference.
>
> Archimedes, of ancient Syracuse, who knew something about the concept of work, told us many centuries ago: "Give me a lever long enough and a fulcrum strong enough and I can move the world." Today, at last, we have the prospect of a lever long enough and supported strongly enough to do something for our children of poverty.
>
> This is the underlying purpose of the $1 billion the President is requesting for Title I of S. 370. In the past, proposals were presented calling for general aid to provide a financial underpinning for the whole school system. The new program, however, looks to the educational needs of the children of poverty -- all of them -- whether in public or in private schools. It commits education to end the paralysis that poverty breeds, a paralysis that is chronic and contagious and runs from generation to generation.[52]

In short, the Commissioner's statement declared the proposal in Title I "to help educate the children of poverty" to be "the heart of the President's program. Around it, all the other elements were conceived to strengthen the quality and equality of educational opportunity at its points of critical weakness."[53]

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[52] Ibid., 630-631.

[53] Ibid., 631.

In his statement concerning Title II, Commissioner Keppel reported that thousands of public and nonpublic schools did not have libraries and that "literally millions" of pupils -- "especially elementary pupils -- do not have a library available to them." Stated in terms of individual pupils, "more than 10 million pupils" in public schools -- nearly 30 percent of all pupils over the Nation -- lacked access to a school library." In these schools, according to the Commissioner, the answer to "why Johnny can't read may well be that there is little for him to read and little stimulus or pleasure in reading."[54]

In attempting further to justify Title II, Keppel stated:

> We conclude, as did the President in his message on education: ". . . the cost of purchasing textbooks at increasing prices puts a major obstacle in the path of education -- an obstacle that must be eliminated."
>
> Title II proposes to correct these inadequacies with a 5-year program which makes books and other printed materials available to the school children of our Nation.
>
> Title II, then, will serve to raise the quality of instruction for all our students by laying a financial floor under the instructional materials required by modern schools and good teaching.[55]

The Commissioner began his justification of Title III by indicating that in the years since 1957, "the quantity, range, and quality of American education" had become "matters of intense public, professional, and congressional concern."

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[54] Ibid., 848.

[55] Ibid., 851.

Further, he suggested that as a result of the "healthy and useful debate over the effectiveness, direction, and future" of educational institutions, the schools "are stronger and more effective than ever before." On the other hand, because of "the distances we have traveled, we can now see how far we still must go."[56]

Three specific "areas of concern" about American education give special significance to Title III. These areas of concern were stated as follows:

> The first is to supplement educational programs and facilities which are available to the local community. The second is to stimulate progress toward the achievement of higher quality education by providing better services than are currently available. The third is to insure that flexibility, innovation, and experimentation become an integral part of our educational system. Title III is designed to meet these three vital needs of our educational system through a program that preserves and enhances the valuable traditions of local autonomy and responsibility for education.[57]

In reference to Title V. Keppel explained the rationale of this program to aid state departments of education as being twofold: (1) The Federal government has a "vital interest in strengthening, stimulating, and supplementing educational leadership resources" within state education agencies; and (2) it is "clearly in the national interest" for the states "to identify and meet educational needs through constitutional agencies."[58]

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[56] Ibid.

[57] Ibid., 851-852.

[58] Ibid., 863.

In summarizing the intent of Title V, the Commissioner asserted:

> . . . this title seeks to avoid the development or maintenance of such harmful educational consequences as the following: the creation of additional imbalances in the staffing and financial patterns of the State departments of education; the shift of major emphasis by State departments of education from the overall effectiveness of education to important but limited problem areas; impeding the effective administration of this act and other educational legislation of the Congress; and perhaps most important, weakening rather than strengthening the decentralized approach to American education, as represented in our varied and individualized State departments of education.[59]

On April 9, 1965, the Senate passed the Elementary and Secondary Education Act of 1965. Through the enactment of ESEA, Congress virtually doubled the amount of Federal financial assistance available to public education. In so doing, a number of new categorical aid programs were authorized. These new programs, according to Bailey and Mosher, indicate that "skillful compromises were made to meet the objectives of a variety of interest groups." In addition, "traditional patterns of intergovernmental relations were altered," and the nation's educators were "nudged into new programs and administrative experiments."[60]

ESEA Title I -- Legislative Provisions and Method of Allocation

Title I of ESEA provides financial assistance to state and local education agencies for the purpose of expanding

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[59] Ibid., 880.

[60] Bailey and Mosher, op. cit., 70.

or improving their educational programs to meet the special needs of (1) educationally disadvantaged children in low-income areas; (2) handicapped, neglected, delinquent, and foster children; (3) children of migratory agricultural workers, and (4) American Indian children attending Bureau of Indian Affairs schools.

In brief, the provisions of Title I are directed toward compensatory education for economically deprived children. That is, Title I provides funds which are in addition to state and local efforts to alleviate the factors denying poor children their right to an equal educational opportunity. Programs are designed to give special educational assistance to children whose level of educational achievement is below normal for their age, and to help overcome barriers to learning. Funds may be used to provide such services as supplementary and remedial instruction, pupil and family counseling, cultural enrichment, and preschool activities.[61]

The basic Title I allocations are computed on the basis of counties rather than school districts. The number of eligible children in a county is multiplied by one-half the state or national per pupil expenditure, whichever is higher. The number of eligible children is derived by determining the number of children, age 5-17, who are (1) in families with an annual income of less than the established low-income factor; (2) in families receiving an income in

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[61] U.S. Office of Education, Bureau of Elementary . . . Programs, 9.

excess of the low-income factor from payments under the program of Aid to Families with Dependent Children; or (3) living in institutions for neglected or delinquent children, or living in foster homes supported by public funds.[62]

Thus, the formula for distributing funds provides for direct allocations from the Federal government to the states on the basis of counties. County allocations are then suballocated to local school districts by state education agencies on the basis of the most recent data which best reflect the distribution of low-income children in the districts. Additional funds are provided for state agencies directly operating or supporting schools for neglected or delinquent children and for handicapped children. Grants for children of migratory agricultural workers are also separately computed, as indicated in the following.

> The maximum grant for handicapped and for neglected or delinquent children for which the State agency is directly responsible . . . will be determined by multiplying the number of eligible children in average daily attendance . . . under each of these categories, by one-half the average per pupil expenditure in the State, or beginning with fiscal year 1968, for handicapped children, one-half the average per pupil expenditure in the United States, if higher than the State average.
>
> The maximum grants . . . for migratory children . . . shall be an amount equal to the Federal percentage of average per pupil expenditure in the United States multiplied by (a) the estimated number of such migratory children (aged 5-17), inclusive, who reside in the State full-time, and (b) the full-time equivalent of the estimated number of children who reside in the State part-time.[63]

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[62] U.S. Dept. of Health, Education, and Welfare, Grants-In-Aid and other Financial Assistance Programs, 1967 Edition (Washington, D.C.: U.S. Government Printing Office, 1967), 33.

[63] Ibid., 34.

Public Law 89-313 amended Title I of ESEA to authorize the expenditure of funds to strengthen state-operated programs for the handicapped. Children who have special learning problems resulting from mental retardation, emotional disturbance, visual limitations, hearing impairments, speech defects, and crippling conditions or other health problems are eligible for services through Title I.

The program to improve education for institutionalized, neglected, and delinquent children was authorized through an amendment to Title I by P. L. 89-750. This amendment also provided special educational services to children of migratory farm workers.

In addition to authorizing grants for state distribution to local education agencies, Title I authorizes the Commissioner to pay each state up to 1 percent of its basic grant amount, or a minimum of $150,000, for necessary administrative expenses. Such expense may include technical assistance for annually measuring and evaluating the effectiveness of the grant programs in meeting the special needs of educationally deprived children.

In summary, Title I assistance to state and local education agencies constitutes an overwhelming percentage of the funds provided by the Elementary and Secondary Education Act of 1965. Because this is the case, the following statement seems to be especially important:

> It is very important to bear in mind clearly what Title I is meant to accomplish and what it is not meant to accomplish. This is so central to an understanding of this Title that I

> am going to give some rather specific examples. It is not general aid to education. In a school district where there are some schools attended largely by low-income family children, and some schools not in that category, the funds are not to be used in both types of schools but are to be concentrated for the benefit of the educationally deprived. Again, if within a single school there is a concentration of educationally deprived children, the funds are to be used to strengthen the education of this group. To be sure, programs established in such a school even though designed primarily to aid low-income children might very well benefit other children who do not fall under the specific income level of the law. There is no intention in this legislation to label children, but rather to the extent possible, to identify groups of such children so that effective programs can be undertaken to remove their disadvantage. Poverty measures are used to make the allocations of funds to the areas of high concentration of educationally deprived children. Once that point is reached, educational measures are used to determine which specific children will participate in the programs established to eliminate the effects of deprivation.[64]

To restate a key point, the law generally employs a low-income criterion to allocate funds, but educational needs, not family income, are the major determinants of which children should be benefited under Title I.

ESEA Title II -- Legislative Provisions and Method of Allocation

Title II of ESEA authorizes provision of funds to improve instruction through acquisition of school library resources, textbooks, and other printed and published materials for the use of teachers and children in public and private elementary and secondary schools.[65]

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[64] From a presentation by Ralph J. Becker at Regional Information Meetings on P. L. 89-10, May 18-21 and 25, 1965 (processed), 2.

[65] U.S. Office of Education, Bureau of Elementary . . . Programs, 12.

This program assists schools in providing instructional materials not previously available in sufficient quantity and quality. Funds may be used to purchase books, periodicals, documents, pamphlets, photographs, reproductions, pictorial or graphic works, musical scores, maps, charts, globes, sound recordings, processed slides, or any other printed or published materials of a similar nature. Excluded are equipment and furniture, materials to be used in religious instruction, and materials consumed in use or those which cannot be expected to last for more than one year.[66]

The legislation defines the term "state" to include the District of Columbia, Puerto Rico, American Samoa, Guam, the Virgin Islands, and the Trust Territory of the Pacific Islands, in addition to the fifty states. The 1966 amendments through P. L. 89-750 provide that allocations also go to the Departments of Interior and Defense for children and teachers in schools operated by those departments. These amendments also permit states to continue to use up to 5 percent of their allocation, or $50,000, whichever is greater, for administrative costs.[67]

Allocations to the states and the District of Columbia are based on the number of children enrolled in public and private elementary and secondary schools in the state in relation to the number enrolled in all states and the District.

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[66] Ibid.

[67] U.S. Dept. of Health, . . . , Grants-In-Aid . . . , 36.

Not more than 3 percent of the amount appropriated for allocation among the states is authorized for allocation among the outlying territories.[68]

In order to receive its allocation, each state must submit to the U.S. Office of Education a State Plan for the operation of its Title II program. This plan must provide for the distribution of materials on the basis of relative need, and must assure that materials will be provided on an equitable basis for the use of children and teachers in private schools. There is no matching provision in the Title II program, but current levels of state and local support must be maintained.

Public Law 89-750, signed by President Johnson on November 3, 1966, made five amendments to the original title. These are:

> 1. Eligibility was extended to include children and teachers in elementary and secondary schools operated for Indian children by the Department of the Interior and in the overseas dependent schools of the Department of Defense.
>
> 2. The amount used for administration of the State plan for any fiscal year should not exceed an amount equal to 5 percent of the amount paid to the State for that year, or $50,000, whichever is greater.
>
> 3. Out of its funds for administration, a State should make appropriate amounts available to local education agencies for the responsibilities it assigns them for the distribution and control of materials acquired under Title II.
>
> 4. Section 203(a)(3)(A) concerned with relative need was reworded to read: ". . . take into

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[68] Ibid.

consideration the relative need, as determined from time to time, of the children and teachers of the State for such library resources, textbooks, or other instructional materials . . . ." This amendment requires periodic review, and, if necessary, revision of the criteria for relative need.

5. To secure the effective and efficient use of funds, officials must provide for appropriate coordination at both State and local levels between programs for the acquisition of library resources carried out under this title and any programs carried out under the Library Services and Construction Act.[69]

ESEA Title III -- Legislative Provisions and Method of Allocation

Title III of ESEA authorizes funds to support supplementary educational centers and services in order to stimulate and assist in (1) providing vitally needed educational services not available in sufficient quality and quantity, and (2) establishing and developing exemplary elementary and secondary school education programs to serve as models for regular school programs. Through the provisions of Title III, Congress has attempted to "stimulate local school districts to seek creative solutions to their educational problems. For this reason, the Title III program is also known as PACE (Projects to Advance Creativity in Education)."[70]

Project applications may request funds for innovative and exemplary programs designed to apply new educational knowledge or to provide vitally needed supplementary services.

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[69]As reported in U.S. Dept. of Health, Education, and Welfare, Office of Education, Title II Elementary and Secondary Education Act of 1965, Second Annual Report (Washington, D.C.: U.S. Government Printing Office, Feb., 1969), 5.

[70]U.S. Office of Education, Bureau of Elementary . . . Programs, 14.

Particularly encouraged is the development of projects related to the improvement of education for deprived children in inner city areas and programs designed to advance individualized instruction. The development of programs of early childhood education, programs to provide quality education for minority groups, and programs for children in geographically isolated areas are similarly encouraged. Also, programs designed to develop planning and evaluation competencies of personnel are emphasized. In addition, at least 15 percent of funds available for grants in any state must be reserved for special programs for the handicapped.[71]

From the total of the funds allocated to the fifty states and the District of Columbia, each state receives a base allocation of $200,000. Each state is then allocated a portion of the remaining balance. Half of the balance is apportioned in the same proportion that the number of children age 5-17 in each state bears to the total number of such children in all the states and the District of Columbia. The other half is apportioned in the same ratio that the population of each state bears to the population of all states and the District of Columbia. An amount not to exceed 3 percent of the total appropriation is made available to Puerto Rico, Guam, American Samoa, the Virgin Islands, the Trust Territory of the Pacific Islands, and schools operated by the Bureau of Indian Affairs and the Department of Defense.[72]

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[71] Ibid.

[72] U.S. Dept. of Health, . . . , Grants-In-Aid . . . , 38.

Although project proposals may be submitted only by local public education agencies, other educational and cultural agencies may develop innovative ideas which can be incorporated into projects submitted. Involvement of representatives of educational and cultural resources of the area to be served is required in both planning and conducting programs. "Projects must provide for the participation of children and teachers in nonprofit private schools of the area to be served."[73]

During fiscal year 1969, state education agencies administered 75 percent of the funds available for grants in their states through state plans approved by the Commissioner of Education. The U.S. Office of Education administered the remaining 25 percent of the available funds. Beginning in fiscal year 1970, state education agencies became responsible for administering all Title III funds through an approved state plan.[74]

ESEA Title V -- Legislative Provisions and Method of Allocation

Title V of ESEA authorizes grants to states, on a non-matching formula basis, to strengthen the leadership resources of their state agencies and to reinforce their ability to identify and meet the needs of elementary and secondary education. Programs and activities eligible for Title V support have been stated as follows:

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[73]U.S. Office of Education, Bureau of Elementary . . . Programs, 14.

[74]Ibid.

> States are encouraged to seek grants within their allotments to improve or develop their capacities in such fields or in connection with such programs as (1) educational planning and evaluation; (2) collection and processing of educational data; (3) dissemination of information on the condition, progress, and needs of education; (4) educational research and demonstration programs; (5) distribution of newly developed curriculum materials; (6) improvement of teacher preparation; (7) utilization of auxiliary personnel such as teacher aides; (8) financing of public education in the state; (9) measurement of educational achievement; (10) improving competency of State and local educational personnel in leadership, administration, and specialist services; (11) providing local agencies and schools with consultative and technical services relating to academic and special education; (12) insuring that benefits of Head Start and other pre-school programs not be lost in early school years; and (13) providing means for local education agencies in metropolitan areas to undertake comprehensive planning.[75]

State education agencies and public regional interstate commissions also may participate in multistate projects of an experimental nature. These projects are authorized through Section 505 and represent attempts to find new solutions to problems common to several or all of the states. This special project reserve (originally 15 percent, but 5 percent since 1968 following amendment by P. L. 90-247) has supported multistate projects and conferences dealing with such problems of common interest as designing education for the future, developing integrated educational information systems among states, school finance, and a wide variety of others.

The basic grants program of Title V, authorized through Section 503, is funded with 95 percent of the funds appropriated. These funds, minus 2 percent for Puerto Rico and

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[75] Ibid., 16.

outlying territories, are allocated to states on the basis of the following formula: (1) 40 percent of available funds is apportioned equally among the states; and (2) 60 percent is apportioned according to the ratio of the number of public school pupils in the state to the number of public school pupils in all the states.[76]

In order to receive funds from their allocations, state education agencies must make annual application to the Commissioner of Education for grants to conduct activities eligible for funding. Applications for grants may be approved only if the programs, projects, or activities are judged to have a potential for sufficient effectiveness to result in "a significant contribution to strengthening the leadership resources of the state education agency or its ability . . . in meeting the needs of elementary and secondary education in the state."[77]

Beginning in fiscal year 1969, each state has been required to make 10 percent of its allocation available to local education agencies for the same purposes as program funds can be used by a state education agency.

ESEA Title VI-A -- Legislative Provisions and Method of Allocation

Title VI, Education of Handicapped Children, was added to the Elementary and Secondary Education Act of 1965 through the enactment of P. L. 89-750 on November 3, 1966. Part A

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[76] Ibid.

[77] Ibid., 17.

of Title VI provides assistance to the states in initiating, expanding, and improving programs and projects (including the acquisition of equipment and, where necessary, the construction of school facilities) for the education of handicapped children at the preschool, elementary, and secondary school levels. Section 614 defines the term handicapped children in a way which includes children who are mentally retarded, hard of hearing, deaf, speech-impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health-impaired children requiring special education and related services.

Title VI-A funds may be expended for a wide variety of items and services to improve education for handicapped children, including the following: (1) diagnostic services; (2) automated instructional devices and audiovisual aids; (3) prosthetic devices; (4) libraries and materials centers; (5) special transportation arrangements; (6) acquisition, installation, modernization, or replacement of equipment; (7) construction of facilities; (8) individual tutoring; and (9) mobile units to reach handicapped children in rural areas.[78]

From the funds appropriated for allocation to the states, each state and the District of Columbia is allocated an amount in the same ratio to the appropriation as the number of children age 3-21, inclusive, in the state bears to the number of such children in all states. However, there is an

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[78]U.S. Dept. of Health, . . . , Grants-In-Aid . . . , 103.

established minimum of $100,000 for each state. An amount not to exceed 3 percent of the amount appropriated for the states is authorized for Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands -- to be allocated among them according to their respective needs for assistance.[79]

To receive funds under Title VI-A, state education agencies must submit a State Plan to the Commissioner of Education. The plan may stipulate that up to 5 percent of the state's allocation for any fiscal year, or $75,000, whichever is greater, is reserved for administration of the plan (including state leadership activities and consultative services), and for state and local planning activities.[80]

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[79] Ibid.

[80] Ibid.

CHAPTER III

EQUALIZING TENDENCIES OF THE TEN AID PROGRAMS

As stated in Chapter I, the emphasis of this study was upon ten Federal programs of financial assistance, with specific attention given to the equalizing or disequalizing tendencies of the allocation of funds from these programs in relation to the financial abilities of the fifty states to support public elementary and secondary education. In reality, although five subproblems were identified, the study was designed to include two different but significantly related kinds of investigation and data collection: (1) a determination of relevant facts about the legislative origin, intent, and provisions of each of the programs; and (2) a determination of whether there exists a significant equalizing (inverse) or disequalizing (direct) relation between the allocation of funds from the programs and a selected indicator of the relative financial abilities of the states to support public education.

Chapter II provided pertinent information about the legislative origin, intent, and provisions of each of the ten aid programs. The purpose of Chapter III is to present, analyze, and discuss the data collected about the equalizing or disequalizing tendencies of the ten programs when they are compared -- on an individual and combined basis -- with

the indicator of the relative financial abilities of the fifty states; i.e., the amount of personal income per child of school age (age 5-17).

More specifically, the data in this chapter provide information about the aid programs in terms of (1) the program allocations to the fifty states per child of school age, and (2) the program allocations to the fifty states per student enrolled in public elementary and secondary schools. For each of these two ways of treating the allocation of funds from the programs, data are presented about their ranges, means, and standard deviations. The extent of the existence of an equalizing (inverse) or disequalizing (positive) relation between program allocations and personal income of the states is demonstrated through presentation of correlation coefficients derived from both the rank-order and product-moment methods.

Through a conversion of program allocations and personal income data to standard (z) amounts, a series of charts (Figure 1 through Figure 11) is presented to augment a discussion of the data and to illustrate a state-by-state comparison of program allocations per child of school age to program allocations per student enrolled in public schools. Of importance, these charts facilitate comparisons of both ways of analyzing program allocations to personal income per child of school age for each state. In addition, the charts labeled Figure 12 and Figure 13 demonstrate the similarities and differences in the data resulting from use of the two different methods of deriving correlation coefficients.

The original (raw) data from which the findings in this chapter were obtained are shown in tabular form in Appendix A through Appendix C. The tables in Appendix D provide a comparison of program allocations to the states with personal income of the states after actual dollars were converted to standard (z) amounts. The data contained in these tables are the same as those used in the preparation of the figures numbered 1 through 11.

The procedures used in compiling and treating the data presented in this chapter are described in detail in the "Procedures" section of Chapter I.

Categories and Codes of the Variables

The variables with which this chapter is concerned have been categorized and coded through an assignment of symbols as indicated below:

X_1 -- Federal aid program allocations to states per child of school age (age 5-17)

X_2 -- Federal aid program allocations to states per student enrolled in public elementary and secondary schools

Y -- Personal income of states per child of school age (age 5-17)

Because both categories of X variables (X_1 and X_2) include allocations to the states from ten separate aid programs in addition to the total allocation from the ten programs combined, it was necessary to assign subcodes to these variables. X_1 variables have been subcoded as follows:

X_{1a} -- P. L. 81-874 allocation per child of school age

X_{1b} -- P. L. 81-815 allocation per child

X_{1c} -- NDEA Title III allocation per child

X_{1d} -- NDEA Title V-A allocation per child

X_{1e} -- Vocational education (basic grants program) allocation per child

X_{1f} -- ESEA Title I allocation per child

X_{1g} -- ESEA Title II allocation per child

X_{1h} -- ESEA Title III allocation per child

X_{1i} -- ESEA Title V allocation per child

X_{1j} -- ESEA Title VI-A allocation per child

X_{1k} -- Combined programs allocation per child

X_2 variables have been sub-coded as follows:

X_{2a} -- P. L. 81-874 allocation per student enrolled in public elementary and secondary schools

X_{2b} -- P. L. 81-815 allocation per student

X_{2c} -- NDEA Title III allocation per student

X_{2d} -- NDEA Title V-A allocation per student

X_{2e} -- Vocational education (basic grants program) allocation per student

X_{2f} -- ESEA Title I allocation per student

X_{2g} -- ESEA Title II allocation per student

X_{2h} -- ESEA Title III allocation per student

X_{2i} -- ESEA Title V allocation per student

X_{2j} -- ESEA Title VI-A allocation per student

X_{2k} -- Combined programs allocation per student

Public Law 81-874 -- Variables X_{1a} and X_{2a}

In fiscal year 1968-69, the total of the allocations to the fifty states from Titles I and III of P. L. 81-874 amounted to $492,092,600. Individual state allocations ranged from a low of $119,000 for Vermont to a high of $13,379,000 for Alaska. Table 14 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1a} and X_{2a}

When allocations of funds to the states from P. L. 81-874 were computed to determine the amounts of the allocation per child of school age (X_{1a}) and allocations per student enrolled in public schools (X_{2a}), the summary data presented in Table 1 were found.

Table 1

Range, Mean, and Standard Deviation for Variables X_{1a} and X_{2a}

Data Item	X_{1a}	X_{2a}
Low state allocation	$ 0.90 (W. Va.)	$ 1.01 (W. Va.)
High state allocation	148.66 (Alaska)	187.20 (Alaska)
Range	147.76	186.19
Mean of state allocations	14.88	17.35
Standard deviation	21.12	26.35

Through the use of the t-test, the writer estimated that there is no significant difference between the X_{1a} mean of $14.88 and the X_{2a} mean of $17.35 at either the .05 or .01 level of significance.

Relation between Variable X_{1a} and Variable Y

When allocations to the states per child of school age from P. L. 81-874 (X_{1a}) were correlated with personal income per child of school age of the states (Y), the rank-order method yielded a correlation coefficient of -.035 and the product-moment method produced a coefficient of .016. The test of significance applied to the product-moment coefficient indicated that the relation of .016 is not significant at either the .01 or .05 level of significance.

Relation between Variable X_{2a} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2a}) were correlated with personal income per child of school age of the states (Y), the rank-order method yielded a correlation coefficient of -.031 and the product-moment method produced a coefficient of .020. The test of significance applied to the product-moment coefficient indicated that the relation of .020 is not significant at either the .01 or .05 level of significance.

Analysis and Discussion of the Data

To augment the analysis and discussion of the data presented previously, Figure 1 is included near the end of this

section. In referring to Figure 1, the reader will note that the actual dollar amounts of variables X_{1a}, X_{2a}, and Y were converted to standard (z) amounts for the purpose of charting the relative position of each state on the standard scale. Also, by converting the allocation dollars and personal income dollars to standard amounts, one may determine the relative position of each state in terms of standard deviations from the means of state allocations (X_{1a} and X_{2a}) and personal income (Y). Table 25 in Appendix D presents P. L. 81-874 allocations and personal income data in terms of standard (z) amounts.

Through analysis of Figure 1, the non-existence of a significant inverse or positive relation between the allocation variables and the personal income variable can be seen quite clearly. With the exception of the rather extreme deviation in allocation of funds (X_{1a} and X_{2a}) to Alaska, the chart (Figure 1) shows there is little difference in the extent of deviation of the P. L. 81-874 allocations to states falling above and below the mean personal income per child of school age. This is apparent when one notes that the lines of the chart which connect the scaled allocations of the states (X_{1a} and X_{2a}) deviate above and below the mean in a fashion that shows little inverse or direct relation to the amount of personal income per child of school age (Y). This seems to confirm the nonexistence of a significant relation between the X variables and the Y variable indicated by the correlation coefficients from both the rank-order and product-moment methods.

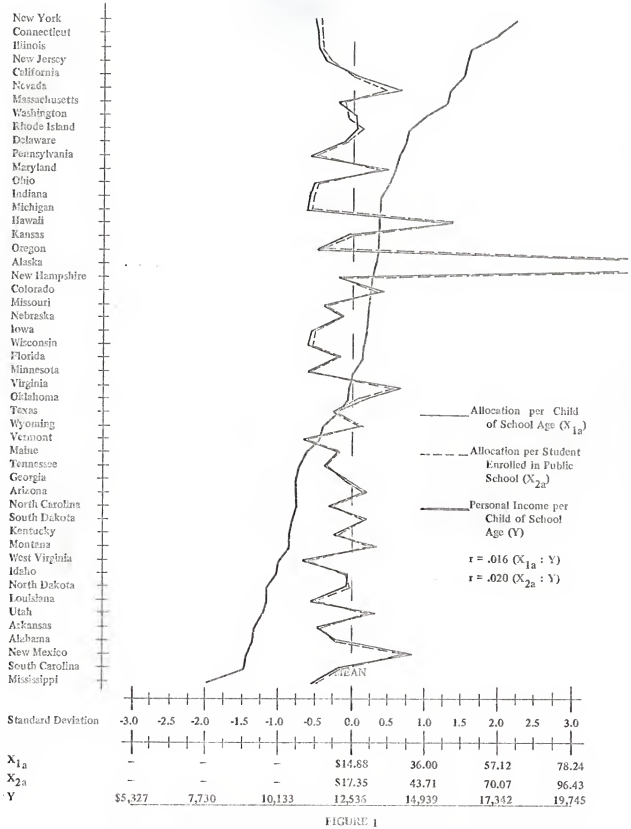


FIGURE 1

STATE-BY-STATE COMPARISON OF P. L. 81-874 ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

In addition, Figure 1 reveals almost no differences between the scaled allocations to states per child of school age (X_{1a}) and the allocations per student enrolled in public schools (X_{2a}). Thus, the t-test indication of no significant difference between the means of variables X_{1a} and X_{2a} appears to be confirmed by the data illustrated in the figure.

Public Law 81-815 -- Variables X_{1b} and X_{2b}

In fiscal year 1968-69, the total of the allocations (obligations) to the fifty states from P. L. 81-815 amounted to $45,655,801. Individual state allocations ranged from $0.00 (no funds allocated) for nine states to $10,880,448 for California. Table 15 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1b} and X_{2b}

When allocations of funds to the states from P. L. 81-815 were computed to determine the amounts of the allocations per child of school age (X_{1b}) and allocations per student enrolled in public schools (X_{2b}), the summary data presented in Table 2 were found.

Through the use of the t-test, the writer estimated that there is no significant difference between the X_{1b} mean of $1.22 and the X_{2b} mean of $1.42 at either the .05 or .01 level of significance.

Table 2

Range, Mean, and Standard Deviation for Variables X_{1b} and X_{2b}

Data Item	X_{1b}	X_{2b}
Low state allocation	$ 0.00 (9 states)	$ 0.00 (9 states)
High state allocation	10.21 (Alaska)	12.82 (Alaska)
Range	10.21	12.82
Mean of state allocations	1.22	1.42
Standard deviation	1.99	2.43

Relation between Variable X_{1b} and Variable Y

When allocations to the states per child of school age from P. L. 81-815 (X_{1b}) were correlated with personal income per child of school age of the states (Y), the rank-order method yielded a correlation coefficient of -.117, and the product-moment method produced a coefficient of -.032. The test of significance applied to the product-moment coefficient indicated that the relation -.032 is not significant at either the .01 or .05 level of significance.

Relation between Variable X_{2b} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2b}) were correlated with personal income per child of school age of the states (Y), the rank-order method yielded a correlation coefficient of -.036 and the product-moment method produced a coefficient of .058. The test of significance applied to the product-moment coefficient indicated

that the relation of .058 is not significant at either the .01 or .05 level of significance.

Analysis and Discussion of the Data

As in the preceding section which dealt with P. L. 81-874, a chart labeled as Figure 2 is included near the end of this section to assist in the analysis and discussion of the data presented about P. L. 81-815. In Figure 2 the actual dollar amounts of variables X_{1b}, X_{2b}, and Y have been converted to standard (z) amounts for the purpose of plotting the relative positions of each state on the standard scale. Also, by converting the allocation dollars and personal income dollars to standard amounts, it is possible to determine the relative position of each state in terms of standard deviations from the means of state allocations (X_{1b} and X_{2b}) and personal income (Y). Table 26 in Appendix D presents P. L. 81-815 allocations and personal income data in terms of standard (z) amounts.

Analysis of Figure 2 reveals essentially the same kind of information obtained from inspection of Figure 1, but there are several findings of sufficient importance to be noted. With the exception of two states (California and Nevada), the states holding the top fifteen positions in amount of personal income per child (variable Y) received allocations from the P. L. 81-815 program (variables X_{1b} and X_{2b}) amounting to less than the mean state allocation.

Very great extremes can be observed regarding the allocations to the states of Hawaii and Alaska. While both of

these states are positioned above the mean in personal income per child of school age (variable Y), the extent of their X_{1b} and X_{2b} deviations above the mean and above variable Y may have helped reduce any equalizing tendency of the program to the slight amount noted earlier. In addition, these two extremes would seem to have considerable influence on the sizes of the means and standard deviations of variables X_{1b} and X_{2b}. As a result, the relative positions of the other states on the scale are probably affected, at least in terms of the degree of their X_{1b} and X_{2b} deviations from the mean.

Further inspection of Figure 2 indicates (if the extreme deviations of Hawaii and Alaska are disregarded) there is, in general, little relation between the kind and extent of X_{1b} and X_{2b} deviations and personal income (Y). This kind of analysis seems to confirm the insignificant relation between the X variables and the Y variable indicated by the correlation coefficients from both the rank-order and product-moment methods.

In addition, Figure 2 reveals only negligible differences between the scaled allocations to the states per child of school age (X_{1b}) and the allocations per student enrolled in public schools (X_{2b}). As a result, the indication of no significant difference between the means of the two X variables provided by the t-test appears to be supported by the data illustrated in the figure.

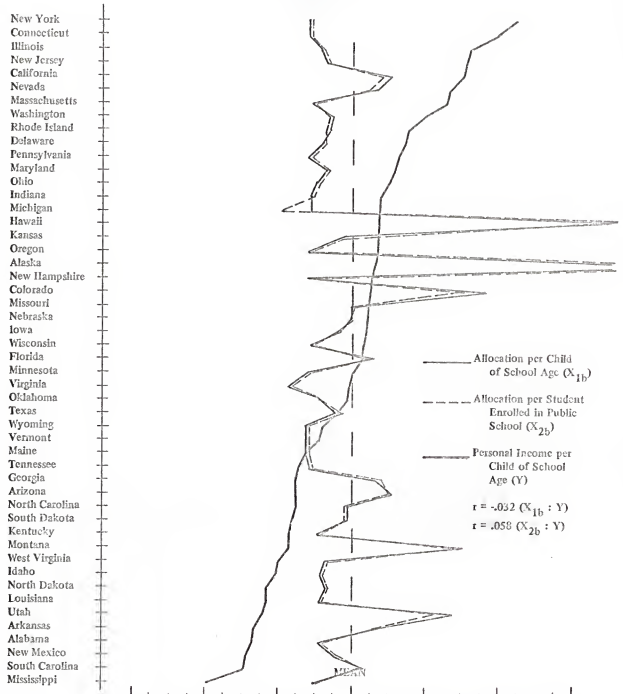


FIGURE 2

STATE-BY-STATE COMPARISON OF P. L. 81-815 ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

NDEA Title III -- Variables X_{1c} and X_{2c}

In fiscal year 1968-69, the total of the allocations to the states from NDEA Title III amounted to $75,681,266. Individual state allocations ranged from $118,875 for Alaska to $5,479,233 for California. Table 16 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1c} and X_{2c}

When allocations of funds to the states from NDEA Title III were computed to determine the amounts of the allocations per child of school age (X_{1c}) and allocations per student enrolled in public schools (X_{2c}), the summary data presented in Table 3 were found.

Table 3

Range, Mean, and Standard Deviation for Variables X_{1c} and X_{2c}

Data Item	X_{1c}	X_{2c}
Low state allocation	$ 0.99 (New York)	$ 1.07 (Nevada)
High state allocation	1.99 (Alabama)	2.36 (Louisiana)
Range	1.00	1.29
Mean of state allocation	1.56	1.81
Standard deviation	0.30	0.33

Through the use of the t-test, the writer estimated that there is no significant difference between the X_{1c} mean

of $1.56 and the X_{2c} mean of $1.81 at either the .01 or .05 level of significance.

Relation between Variable X_{1c} and Variable Y

When allocations to the states per child of school age from Title III of NDEA (X_{1c}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.954 and the product-moment method produced a coefficient of -.924. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.924 is significant at both the .01 and .05 level of significance.

Relation between Variable X_{2c} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2c}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.926 and the product-moment method produced a coefficient of -.934. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.934 is significant at both the .01 and .05 level of significance.

Analysis and Discussion of the Data

As can be found in the preceding sections, a chart (Figure 3) is included near the end of this section to assist in the analysis and discussion of the data presented relative to NDEA Title III. In referring to Figure 3, the reader will note that the actual dollar amounts of variables X_{1c}, X_{2c},

and Y were converted to standard (z) amounts for the purpose of charting the relative positions of each state on the standard scale. Also, by converting the actual dollars associated with the variables to standard amounts, the relative position of each state can be compared in terms of standard deviations from the means of the variables. Table 27 in Appendix D presents NDEA Title III allocations and personal income data in terms of standard (z) amounts.

Analysis of Figure 3 reveals quite clearly some of the reasons why the coefficients derived from the correlation of variables X_{1c} and X_{2c} with variable Y produced the highest degree of inverse relation of all of the variables correlated with Y. Almost without exception, the states having personal incomes per child scaled above the mean received NDEA Title III allocations scaled below the mean. Further inspection of the chart shows that there is a high degree of inverse association between the scaled deviations of the X and Y variables for most states. For example, while the state of New York has a personal income per child (Y) scaled at +2.24 standard deviations (above the mean), the allocation variables (X_{1c} and X_{2c}) are scaled respectively at -1.90 and -1.66 (below the mean). Conversely, variable Y for Mississippi is scaled at -1.97 standard deviations while variables X_{1c} and X_{2c} are scaled respectively at +1.98 and +1.45 standard deviations. Additional inspection of the figure suggests that this kind of inverse relation between the deviations of the X and Y variables is generally consistent throughout the list of states.

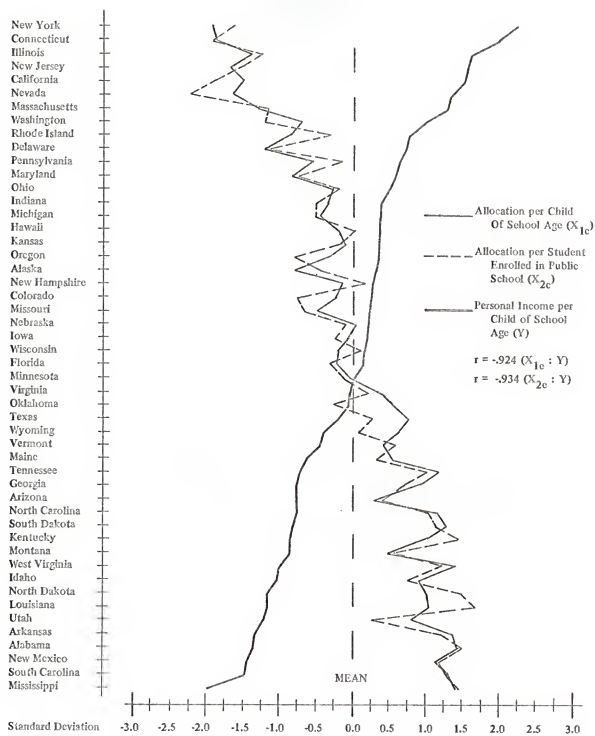


FIGURE 3

STATE-BY-STATE COMPARISON OF NDEA TITLE III ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

Although Figure 3 reveals a few rather large differences in the extent of deviations from the mean when a comparison is made between variables X_{1c} and X_{2c}, for most states these differences appear to be comparatively small. Thus, the figure seems to support the results of the t-test that there is no significant difference between the means of variables X_{1c} and X_{2c}.

NDEA Title V-A -- Variables X_{1d} and X_{2d}

In fiscal year 1968-69, the total of the allocations to the fifty states from Title V-A of NDEA amounted to $16,653,270. Individual state allocations ranged from $49,960 for Nevada to $1,560,553 for California. Table 17 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1d} and X_{2d}

When allocations of funds to the states from NDEA Title V-A were computed to determine the amounts of the allocations per child of school age (X_{1d}) and allocations per student enrolled in public schools (X_{2d}), the summary data presented in Table 4 were found.

Results obtained from use of the t-test indicated that there is a significant difference between the X_{1d} mean of $0.34 and the X_{2d} mean of $0.39 at both the .05 and .01 level of significance.

Table 4

Range, Mean, and Standard Deviation for Variables X_{1d} and X_{2d}

Data Item	X_{1d}	X_{2d}
Low state allocation	$ 0.31 (Arizona)	$ 0.32 (Washington)
High state allocation	0.67 (Alaska)	0.84 (Alaska)
Range	0.36	0.52
Mean of state allocations	0.34	0.39
Standard deviation	0.06	0.08

Relation between Variable X_{1d} and Variable Y

When allocations to the states per child of school age from NDEA Title V-A (X_{1d}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.296 and the product-moment method produced a coefficient of .006. The test of significance applied to the product-moment coefficient indicated that the relation of .006 is not significant at either the .01 or .05 level of significance.

Relation between Variable X_{2d} and Variable Y

When allocations to the states per student enrolled in public schools from NDEA Title V-A (X_{2d}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of .156 and the product-moment method produced a coefficient of .065. The test of significance applied to the product-moment coefficient

indicated that the relation of .065 is not significant at either the .01 or .05 level of significance.

Analysis and Discussion of the Data

Figure 4 is included near the end of this section to assist in the analysis and discussion of the data presented relative to NDEA Title V-A. As indicated in the preceding sections dealing with other programs, the actual dollars associated with the X and Y variables have been converted to standard (z) amounts to facilitate charting the relative positions of the states in relation to the variables, and to allow a comparison of these positions in terms of standard deviations. Table 18 in Appendix D presents allocations (X) and personal income (Y) data in terms of standard amounts.

An inspection of Figure 4 suggests that the allocations of funds from NDEA Title V-A (X_{1d} and X_{2d}) bear little relation to the personal income variable (Y). Further inspection indicates that the means of the allocation variables (X_{1d} and X_{2d}) could have been influenced rather substantially by the extreme deviations in allocations to the states of Alaska and Wyoming. This becomes more evident when one notes, other than Alaska and Wyoming, only the state of Nevada received an allocation per child of school age (X_{1d}) scaled above the mean. In reference to allocations per student enrolled in public school (X_{2d}), only New York, Nevada, Rhode Island, Delaware, and Pennsylvania received allocations above the mean allocation -- if the extremes shown for Alaska and Wyoming are disregarded.

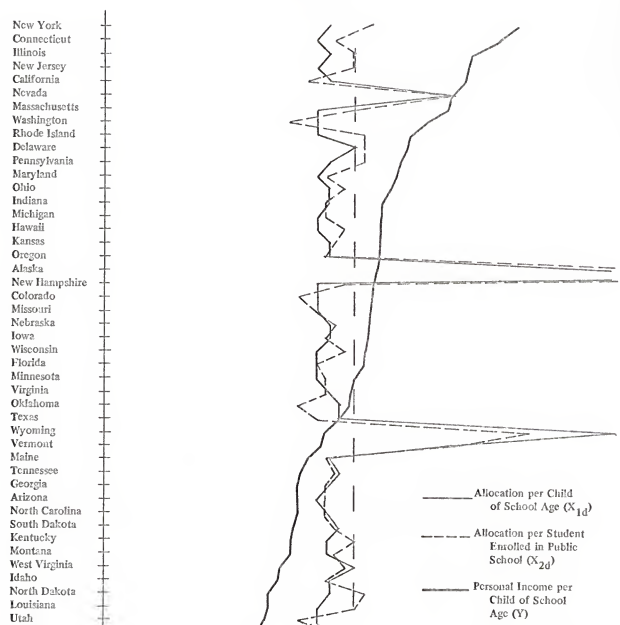


FIGURE 4

STATE-BY-STATE COMPARISON OF NDEA TITLE V--A ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

When variables X_{1d} and X_{2d} are compared in Figure 4, it is evident that only in a few instances are the deviations from the mean charted at or very near the same point on the scale. In regard to most states, the amount of difference between the scaled deviations of variables X_{1d} and X_{2d} is not great. However, these differences do seem to be sufficiently large and uniform throughout the list of states to suggest confirmation of the t-test indication of a significant difference in the means of the two X variables.

Also, analysis of Figure 4 can assist in a partial explanation of the rather substantial difference between the coefficients obtained from the rank-order method and the product-moment method when variables X_{1d} and Y were correlated. That is, the chart indicates in most instances the difference in the amount of allocation per child of school age (X_{1d}) is negligible, and frequently there is no difference. Thus, it is very difficult to clearly differentiate among many of the states when one attempts to establish relative positions by rank. For this reason, the product-moment coefficient could be considered as a more reliable indicator of the kind and extent of the relation between X_{1d} and Y.

Vocational Education Act -- Variables X_{1e} and X_{2e}

In fiscal year 1968-69, the total of the allocations to the states from the basic grants program of the Vocational Education Act (VEA) amounted to $241,822,560. Individual

state allocations ranged from $508,238 for Alaska to $17,471,789 for California. Table 18 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public elementary and secondary schools.

Comparison of Variables X_{1e} and X_{2e}

When allocations to the states from the basic grants program of VEA were computed to determine the amounts of the allocations per child of school age (X_{1e}) and allocations per student enrolled in public schools (X_{2e}), the summary data presented in Table 5 were found.

Table 5

Range, Mean, and Standard Deviation for Variables X_{1e} and X_{2e}

Data Item	X_{1e}	X_{2e}
Low state allocation	$ 3.52 (Conn. and N. Jersey)	$ 3.81 (California)
High state allocation	6.87	8.52
Range	3.35	4.71
Mean of state allocations	5.14	5.93
Standard deviation	0.96	1.10

Results obtained through use of the t-test indicated that there is a significant difference between the X_{1e} mean of $5.14 and the X_{2e} mean of $5.93 at both the .05 and .01 level of significance.

Relation between Variable X_{1e} and Variable Y

When allocations to the states per child of school age from the basic grants program of VEA (X_{1e}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.768 and the product-moment method produced a coefficient of -.772. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.772 is significant at both the .05 and .01 level of significance.

Relation between Variable X_{2e} and Variable Y

When allocations to the states per student enrolled in public schools from the basic grants program of VEA (X_{2e}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.732 and the product-moment method produced a coefficient of -.729. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.729 is significant at both the .05 and .01 level of significance.

Analysis and Discussion of the Data

As in the preceding sections dealing with other programs, a chart (Figure 5) is included near the end of this section to augment the analysis and discussion of the data presented. Figure 5 includes allocations data (X_{1e} and X_{2e}) and personal income data (Y) that have been converted to standard amounts to allow the relative positions of the states and the standard

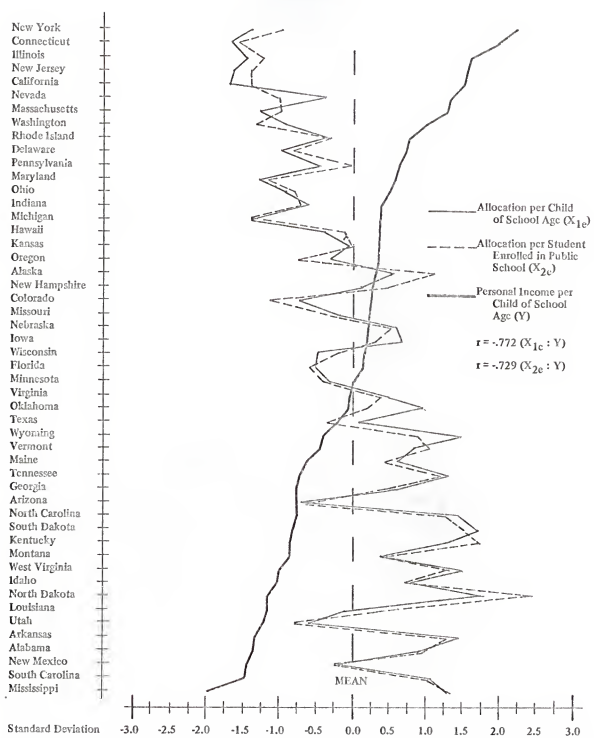


FIGURE 5

STATE-BY-STATE COMPARISON OF VEA BASIC GRANTS ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

deviations from the mean to be plotted on the standard scale. Table 29 in Appendix D presents allocation (X) and personal income (Y) data in terms of standard dollars.

In Figure 5, a rather significant inverse relation can be seen between the allocations variables (X_{1e} and X_{2e}) and the personal income variable (Y). This inverse relation is revealed rather clearly when one notes that among the 27 states scaled above the mean in personal income per child (Y), 24 states received allocations per child (X_{1e}) scaled below the mean. Among the 23 states scaled below the mean relative to variable Y, 19 states are scaled above the mean relative to variable X_{1e}.

When the chart is analyzed for the purpose of comparing variable X_{2e} with variable Y, there can be seen, in general, the same kind and extent of inverse association described in the preceding paragraph.

In comparing variable X_{1e} with variable X_{2e}, as charted in Figure 5, several substantial differences can be observed in the extent of the deviations from the means of these variables. Included among these differences are the allocations to New York, Illinois, Rhode Island, Pennsylvania, New Hampshire, North Dakota, and several other states. Thus, the t-test indication of a significant difference between the means of variables X_{1e} and X_{2e} would seem to be supported by Figure 5.

ESEA Title I -- Variables X_{1f} and X_{2f}

In fiscal year 1968-69, the total of the allocations to the states from Title I of ESEA amounted to $1,086,401,569.

Individual state allocations ranged from $508,238 for Alaska to $17,471,789 for California. Table 19 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1f} and X_{2f}

When allocations to the states from ESEA Title I were computed to determine the amounts of the allocations per child of school age (X_{1f}) and allocations per student enrolled in public schools (X_{2f}), the summary data presented in Table 6 were found.

Table 6

Range, Mean, and Standard Deviation for Variables X_{1f} and X_{2f}

Data Item	X_{1f}	X_{2f}
Low state allocation	$ 8.65 (Nevada)	$ 8.77 (Nevada)
High state allocation	54.85 (Mississippi)	63.54 (Mississippi)
Range	46.20	54.77
Mean of state allocations	21.16	24.46
Standard deviation	10.01	11.54

Results obtained through use of the t-test indicated that there is no significant difference between the X_{1f} mean of $21.16 and the X_{2f} mean of $24.46 at either the .05 or .01 level of significance.

Relation between Variable X_{1f} and Variable Y

When allocations to the states per child of school age from Title I of ESEA (X_{1f}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.617 and the product-moment method produced a coefficient of -.632. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.632 is significant at both the .05 and .01 level of significance.

Relation between Variable X_{2f} and Variable Y

When allocations to the states per student enrolled in public school from Title I of ESEA (X_{2f}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.594 and the product-moment method produced a coefficient of -.609. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.609 is significant at both the .05 and .01 level of significance.

Analysis and Discussion of the Data

As in the preceding sections, a chart (Figure 6) is included near the end of this section to assist in the analysis and discussion of the data presented. Figure 6 includes allocations data (X_{1f} and X_{2f}) and personal income data (Y) that have been converted to standard amounts. This conversion permits charting the relative positions of the states in terms of standard deviations from the means of the variables. Table 30

in Appendix D presents allocations (X) and personal income (Y) data in terms of standard amounts.

Figure 6 demonstrates that there does exist a rather significant inverse relation between the allocations variables (X_{1f} and X_{2f}) and the personal income variable (Y). However, it is not as evident as the inverse relations seen in Figure 3 or Figure 5.

Through analysis of the scaled positions of the states relative to variables X_{1f} and Y, one can see that among the 27 states charted above the mean in personal income (Y), only New York (charted at 0.66) is above the mean in allocation per child of school age (X_{1f}). Among the 23 states falling below the mean in personal income, seven states (Wyoming, -0.43; Vermont, -0.60; Maine, -0.77; Arizona, -0.13; Montana, -0.33; Idaho, -0.58; and Utah, -1.12) are below the mean in allocation per child.

When the chart is inspected relative to variables X_{2f} and Y, virtually the same indication is given for the states above the mean in personal income -- with only New York (0.96) and Alaska (0.15) above the mean in allocation per student enrolled. Concerning the states below the mean in personal income, the same states are charted above and below the mean relative to variable X_{2f} as for variable X_{1f}. Thus, Figure 6 illustrates that the extent of the inverse relation between the X variables and the Y variable is greater for states positioned above the mean in personal income per child than for states falling below the mean in personal income per child.

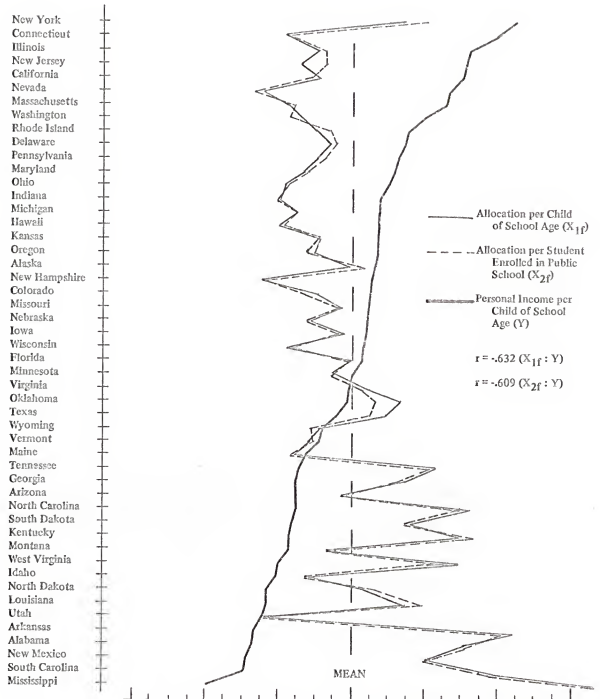


FIGURE 6

STATE-BY-STATE COMPARISON OF ESEA TITLE I ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

Also, based on the overall similarity in the extent of deviations from the means of X_{1f} and X_{2f}, Figure 6 suggests confirmation of the results of the t-test applied to the means of these variables. That is, a significant difference is not evident.

ESEA Title II -- Variables X_{1g} and X_{2g}

In fiscal year 1968-69, the total of the allocations to the states from Title II of ESEA amounted to $48,612,535. Individual state allocations ranged from $66,568 for Alaska to $4,786,011 for California. Table 20 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1g} and X_{2g}

When allocations to the states from ESEA Title II were computed to determine the amounts of the allocations per child of school age (X_{1g}) and allocations per student enrolled in public schools (X_{2g}), the summary data presented in Table 7 were found.

Results obtained from use of the t-test indicated that there is a significant difference between the X_{1g} mean of $0.92 and the X_{2g} mean of $1.06 at both the .05 and .01 level of significance.

Relation between Variable X_{1g} and Variable Y

When allocations to the states per child of school age from Title II of ESEA (X_{1g}) were correlated with personal

Table 7

Range, Mean, and Standard Deviation for Variables X_{1g} and X_{2g}

Data Item	X_{1g}	X_{2g}
Low state allocation	$ 0.74 (Alaska)	$ 0.93 (Alaska)
High state allocation	0.99 (Nebraska)	1.21 (Rhode Island)
Range	0.25	0.28
Mean of state allocations	0.92	1.06
Standard deviation	0.04	0.07

income per child of school age (Y), the rank-order method yielded a correlation coefficient of .486 and the product-moment method produced a coefficient of .415. The test of significance applied to the product-moment coefficient indicated that the relation of .415 is significant at both the .05 and .01 levels of significance.

Relation between Variable X_{2g} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2g}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of .445 and the product-moment method produced a coefficient of .197. The test of significance applied to the product-moment coefficient indicated that the relation of .197 is not significant at either the .05 or .01 levels of significance.

Analysis and Discussion of the Data

As in previous sections, a chart (Figure 7) is included near the end of this section to augment the analysis and discussion of the data presented. In referring to Figure 7, the reader will note that allocations and personal income data are presented in terms of standard amounts. This data conversion permits the charting of relative positions of the states in terms of standard deviations from the means of the two allocations (X) variables and the personal income (Y) variable.

An inspection of Figure 7 reveals that the data with which it is concerned assume a form or appearance that is substantially different from the charts included in previous sections. First, when the line representing variable X_{1g} is analyzed in relation to the line representing variable Y, one can observe that allocations per child of school age (X_{1g}) are charted at points on the scale which reflect a generally direct (positive) relation to personal income per child. A more detailed inspection of this relation shows, with the exception of the extreme negative deviation in the allocation to Alaska, the greatest extent of negative deviation from the mean of X_{1g} is found among the states having the greatest negative deviation from variable Y. In other words, the states receiving comparatively lower allocations per child of school age are positioned among the states in the lower half of the scale (relative to Y). Specifically, these states are Florida (-1.00), Virginia (-0.75), Vermont (-1.00), Tennessee (-0.75),

Georgia (-1.00), Arizona (-1.00), North Carolina (-1.00), Kentucky (-0.75), Montana (-0.25), Idaho (-0.75), North Dakota (-1.00), Louisiana (-1.00), Arkansas (-0.75), Alabama (-1.25), South Carolina (-1.25), and Mississippi (-1.25).

Conversely, when the states charted in the upper half of the figure (relative to Y) are analyzed, only Delaware (-0.50) and the extreme negative position held by Alaska (-4.50) are found to be below the mean in allocation per child of school age (X_{1g}).

When the positions of the states are inspected relative to variable X_{2g} (allocation per student enrolled in public schools) and Y (personal income), one sees that the upper half of the list includes seven states receiving allocations below the mean. Also, concerning the states above the mean in personal income per child, the chart indicates that the extent of the deviation of X_{2g} from one state to the next is substantially greater than that shown for variable X_{1g}.

For states in the lower half of the list (relative to Y), the difference in the deviation of X_{2g} from one state to the next does not appear to be as great for the states in the upper half. Also, when X_{1g} is compared to X_{2g} for states in the lower half, the difference between variables is not as great as the difference found among the states in the upper half of the list.

Based on this kind of analysis, Figure 7 appears to confirm the t-test indication that there is a significant

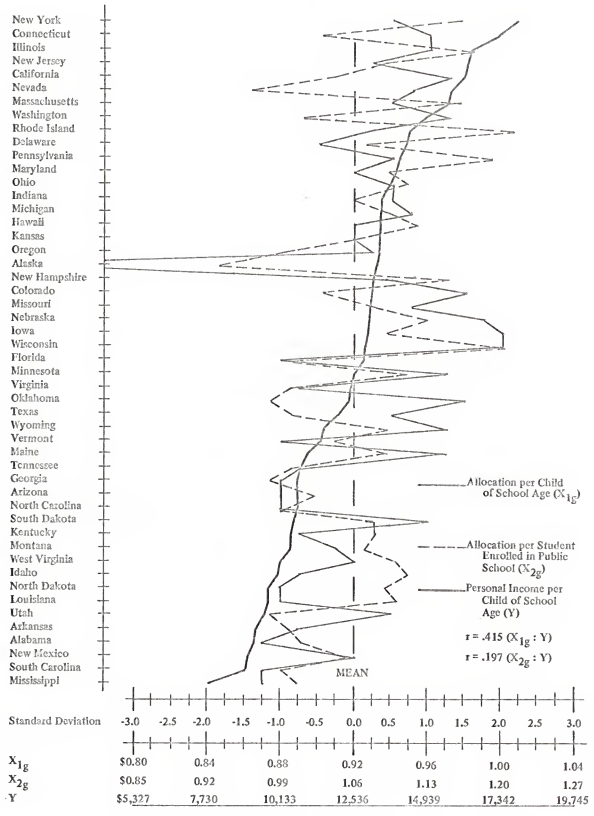


FIGURE 7

STATE-BY-STATE COMPARISON OF ESEA TITLE II ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

difference between X_{1g} and X_{2g}. In addition, a greater positive or direct relation apparently exists between X_{1g} and Y than between X_{2g} and Y.

ESEA Title III -- Variables X_{1h} and X_{2h}

In fiscal year 1968-69, the total of the allocations to the states from Title III of ESEA amounted to $158,984,216. Individual state allocations ranged from $574,744 for Alaska to $14,180,196 for California. Table 21 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1h} and X_{2h}

When allocations to the states from ESEA Title III were computed to determine the amounts of the allocations per child of school age (X_{1h}) and allocations per student enrolled in public schools (X_{2h}), the summary data presented in Table 8 were found.

Table 8

Range, Mean, and Standard Deviation for Variables X_{1h} and X_{2h}

Data Item	X_{1h}	X_{2h}
Low state allocation	$ 2.77 (Michigan)	$ 3.09 (California)
High state allocation	6.44 (Wyoming)	7.66 (Alaska)
Range	3.67	4.57
Mean of state allocations	3.52	4.07
Standard deviation	0.86	1.03

Through the use of the t-test, the writer estimated that there is a significant difference between the X_{1h} mean of $3.52 and the X_{2h} mean of $4.07 at both the .05 and .01 level of significance.

Relation between Variable X_{1h} and Variable Y

When allocations to the states per child of school age (X_{1h}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.202 and the product-moment method produced a coefficient of -.069. The test of significance applied to the product-moment coefficient indicated that this inverse relation is not significant at either the .01 or .05 level of significance.

Relation between Variable X_{2h} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2h}) were correlated with personal income per child of school age(Y), the rank-order method yielded a correlation coefficient of -.068 and the product-moment method produced a coefficient of -.025. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.025 is not significant at either the .01 or .05 level of significance.

Analysis and Discussion of the Data

As in the sections dealing with other programs, a chart (Figure 8) is included near the end of this section to assist

in the analysis and discussion of the data presented. In referring to Figure 8, the reader will note that allocations and personal income data are charted in standard amounts. This data conversion permits analysis and discussion of the data in terms of relative positions of the states and standard deviations from the means of the two allocations variables (X) and the personal income variable (Y).

An examination of Figure 8 suggests general confirmation of the non-significant relations which were indicated when the allocations variables (X_{1h} and X_{2h}) were separately correlated with the personal income variable (Y). Also, it is apparent that the extreme positive deviations in the amount of allocations (X_{1h} and X_{2h}) to Nevada, Delaware, Alaska, and Wyoming probably have some influence on the sizes of the means and the standard deviations of X_{1h} and X_{2h}.

When Figure 8 is examined to determine the relative positions of the states in allocations per child of school age (X_{1h}), one can observe among the 27 states with personal income per child (Y) above the mean 20 states which are below the mean relative to X_{1h}. Among the 23 states below the Y mean, 14 states are also below the X_{1h} mean. This analysis suggests it is among the states below the Y mean that a part of the reason is found for the non-significant inverse relation between X_{1h} and Y.

When the chart is analyzed to compare X_{2h} with Y, much the same kind of trend is found among the states both above

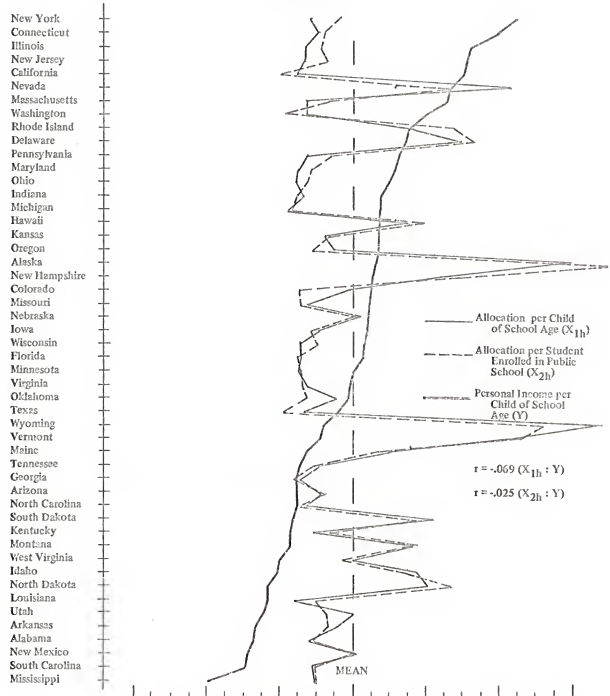


FIGURE 8

STATE-BY-STATE COMPARISON OF ESEA TITLE III ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

and below the Y mean as that described above for X_{1h} and Y. Yet there are several instances where the difference between the extent of the deviation of X_{1h} and the deviation of X_{2h} is of sufficient importance to be noted. Some of the more obvious instances concern New York, New Jersey, Nevada, Rhode Island, Alaska, Colorado, Wyoming, North Dakota, and Louisiana. Since the t-test is essentially an "analysis of variance" technique, these differences in the extent of the deviations may help to explain the t-test indication that there is a significant difference between the means of X_{1h} and X_{2h}.

ESEA Title V -- Variables X_{1i} and X_{2i}

In fiscal year 1968-69, the total of the allocations to the states from Title V of ESEA amounted to $27,407,475. Individual state allocations ranged from $242,131 for Alaska to $1,908,448 for California. Table 22 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1i} and X_{2i}

When allocations to the states from ESEA Title V were computed to determine the amounts of the allocations per child of school age (X_{1i}) and allocations per student enrolled in public schools (X_{2i}), the summary data presented in Table 9 were found.

Table 9

Range, Mean, and Standard Deviation for Variables X_{1i} and X_{2i}

Data Item	X_{1i}	X_{2i}
Low state allocation	$ 0.33 (New York)	$ 0.41 (California)
High state allocation	2.77 (Wyoming)	3.39 (Alaska)
Range	2.44	2.98
Mean of state allocations	0.88	1.02
Standard deviation	0.59	0.68

Through the use of the t-test, the writer estimated that there is a significant difference between the X_{1i} mean of $0.88 and the X_{2i} mean of $1.02 at both the .05 and .01 level of significance.

Relation between Variable X_{1i} and X_{2i}

When allocations to the states per child of school age (X_{1i}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.328 and the product-moment method produced a coefficient of -.127. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.127 is not significant at either the .01 or .05 level of significance.

Relation between Variable X_{2i} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2i}) were correlated with personal income per

child of school age (Y), the rank-order method yielded a correlation coefficient of -.331 and the product-moment method produced a coefficient of -.120. The test of significance applied to product-moment coefficient indicated that the inverse relation of -.120 is not significant at either the .01 or .05 level of significance.

Analysis and Discussion of the Data

As in the sections dealing with other programs, a chart (Figure 9) is presented near the end of this section to assist in the analysis and discussion of the data presented. The allocations variables (X_{1i} and X_{2i}) and the personal income variable (Y) have been converted to standard amounts to facilitate their being charted on the standard scale, as explained more fully in previous sections.

An examination of Figure 9 reveals that its form or appearance is quite similar to that of the data presented in Figure 8, which related to ESEA Title III.

The reader will note there is not a substantial amount of difference in the correlation coefficients derived when the allocations variables (X_{1h} and X_{2h}) were separately correlated with the personal income variable (Y). Through separate and combined analyses of the two X variables in relation to Y, one can see why this apparently negligible difference is found. That is, there are only minor differences from state-to-state in the charted deviations of variables X_{1i} and X_{2i}.

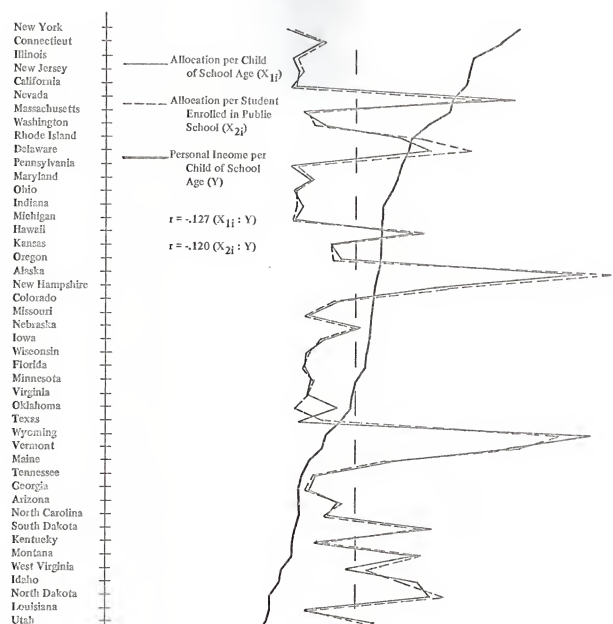


FIGURE 9

STATE-BY-STATE COMPARISON OF ESEA TITLE V ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

Even though the t-test indicated a significant difference in the means of X_{1i} and X_{2i}, Figure 9 shows rather clearly that the extent of this difference is not as great as the differences shown when similar comparisons were made in Figures 4, 5, and 8.

The rather extreme positive deviations in the ESEA Title V allocations (X_{1i} and X_{2i}) to Nevada, Delaware, Alaska, and Vermont can be seen as probably exerting some influence on the size of the mean and standard deviation of both X variables. However, considering the data as they appear in Figure 9, support can be found for the previously noted indication of no significant relation (direct or inverse) between X variables and the Y variable.

ESEA Title VI-A -- Variables X_{1j} and X_{2j}

In fiscal year 1968-69, the total of the allocations to the states from ESEA Title VI-A amounted to $28,297,661. Individual state allocations ranged from $100,000 for six states to $2,397,629 for California. Table 23 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public school.

Comparison of Variables X_{1j} and X_{2j}

When allocations to the states from ESEA Title VI-A were computed to determine the amounts of the allocations per child of school age (X_{1j}) and allocations per student enrolled in public schools (X_{2j}), the summary data presented in Table 10 were found.

Table 10

Range, Mean, and Standard Deviation for Variables X_{1j} and X_{2j}

Data Item	X_{1j}	X_{2j}
Low state allocation	$ 0.47 (Arizona)	$ 0.52 (California)
High state allocation	1.11 (Alaska & Wyoming)	1.39 (Alaska)
Range	0.64	0.87
Mean of state allocations	0.59	0.67
Standard deviation	0.13	0.15

Results obtained through use of the t-test indicated that there is a significant difference between the X_{1j} mean of $0.59 and the X_{2j} mean of $0.67 at both the .05 and .01 levels of significance.

Relation between Variable X_{1j} and Variable Y

When allocations to the states per child of school age from ESEA Title VI-A (X_{1j}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.388 and the product-moment method produced a coefficient of -.101. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.101 is not significant at either the .01 or .05 level of significance.

Relation between Variable X_{2j} and Variable Y

When allocations to the states per student enrolled in public schools (X_{2j}) were correlated with personal income per child of school age (Y), the rank-order method yielded

a correlation coefficient of -.124 and the product-moment method produced a coefficient of -.042. The test of significance applied to the product-moment coefficient indicated that the inverse relation is -.042 and is not significant at either the .01 or .05 level of significance.

Analysis and Discussion of the Data

As in the sections dealing with other programs, a chart (Figure 10) is presented near the end of this section to augment the analysis and discussion of the data presented. The allocations variables (X_{1j} and X_{2j}) and the personal income variable (Y) have been converted to standard amounts to facilitate their being charted on the standard scale, as explained more fully in previous sections.

An inspection of Figure 10 immediately suggests the influence of the allocations (X variables) to four states on the scaled positions of the other states. These four states are Nevada, Alaska, Wyoming, and Vermont. However, the allocations to these states bear little relation to their scaled personal income (Y) position.

Further examination of the chart reveals that among the 27 states above the mean relative to Y, only three are above the mean relative to X_{1j}. Of the 23 states below the Y mean, 12 of these are positioned above the X_{1j} mean. Thus, as indicated by the product-moment coefficient of -.101, a slight inverse relation between X_{1j} and Y does seem to exist.

Analysis of variable X_{2j}, as scaled in Figure 10, discloses that among the states above the mean in personal income

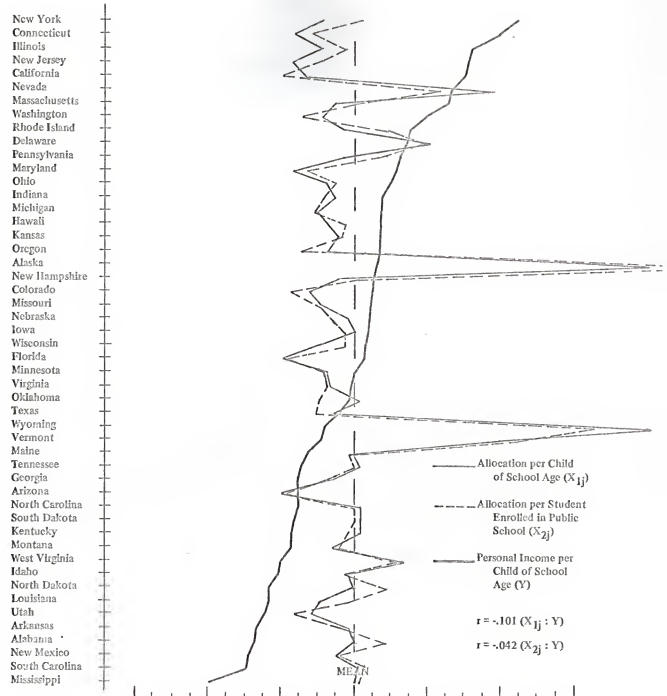


FIGURE 10

STATE-BY-STATE COMPARISON OF ESEA TITLE VI–A ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

per child (Y), seven of these are above the X_{2j} mean. Among the states below the Y mean, 12 of these are scaled above the X_{2j} mean. Further inspection suggests that there is not a significant inverse relation between X_{2j} and Y.

In comparing X_{1j} with X_{2j}, Figure 10 shows that some difference does exist between the scaled positions of most states. Among the more obvious of these are New York, Illinois, New Jersey, California, Nevada, Rhode Island, Wisconsin, Oklahoma, and Alabama. As a result, the t-test indication of a significant difference between the means of X_{1j} and X_{2j} is probably confirmed by Figure 10.

Combined Allocations of the Ten Programs -- Variables X_{1k} and X_{2k}

In fiscal year 1968-69, the combined total of the allocations to the states from the ten programs amounted to $2,221,608,953. Allocations to individual states ranged from $3,971,936 for Vermont to $217,799,244 for California. Table 24 in Appendix C provides a state-by-state presentation of total funds allocated, allocations per child of school age, and allocations per student enrolled in public schools.

Comparison of Variables X_{1k} and X_{2k}

When the combined allocations to the states from the ten programs were computed to determine the amounts of the allocations per child of school age (X_{1k}) and allocations per student enrolled in public schools (X_{2k}), the summary data presented in Table 11 were found.

Table 11

Range, Mean, and Standard Deviation for Variables X_{1k} and X_{2k}

Data Item	X_{1k}	X_{2k}
Low state allocation	$ 25.44 (Michigan)	$ 37.95 (Indiana)
High state allocation	197.97 (Alaska)	249.29 (Alaska)
Range	172.53	211.34
Mean of state allocations	50.23	58.20
Standard deviation	25.21	31.44

Through the use of the t-test, the writer estimated that there is no significant difference between the X_{1k} mean of $50.23 and the X_{2k} mean of $58.20 at both the .05 or .01 level of significance.

Relation between Variable X_{1k} and Variable Y

When the combined allocations to the states per child of school age from the ten programs (X_{1k}) were correlated with personal income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.565 and the product-moment method produced a coefficient of -.285. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.285 is significant at the .05 level, but not at the .01 level.

Relation between Variable X_{2k} and Variable Y

When the combined allocations to the states per student enrolled in public schools (X_{2k}) were correlated with personal

income per child of school age (Y), the rank-order method yielded a correlation coefficient of -.581 and the product-moment method produced a coefficient of -.246. The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.246 is not significant at either the .05 or .01 level of significance.

Analysis and Discussion of the Data

As in the previous sections dealing with individual program allocations, Figure 11 is included near the end of this section to assist in the analysis and discussion of the data presented. The allocations data and the personal income data have been converted to standard amounts to permit their being charted on the standard scale. Table 35 in Appendix D presents the converted allocations and personal income data used in preparing Figure 11.

Through analysis of Figure 11, a slight inverse relation between the allocations variables (X_{1k} and X_{2k}) and the personal income variable can be seen. If one can say that such a relation exists, it would be more in evidence for states at the top and bottom extremes relative to the personal income variable (Y).

When the kind and extent of deviation from the mean occurring in variable X_{1k} is compared to the deviation in variable Y, very little consistency can be seen from one state to the next. This suggests that the extent of the inverse relation is not greatly significant. On the basis of this kind of analysis, the significant inverse relation (-.285)

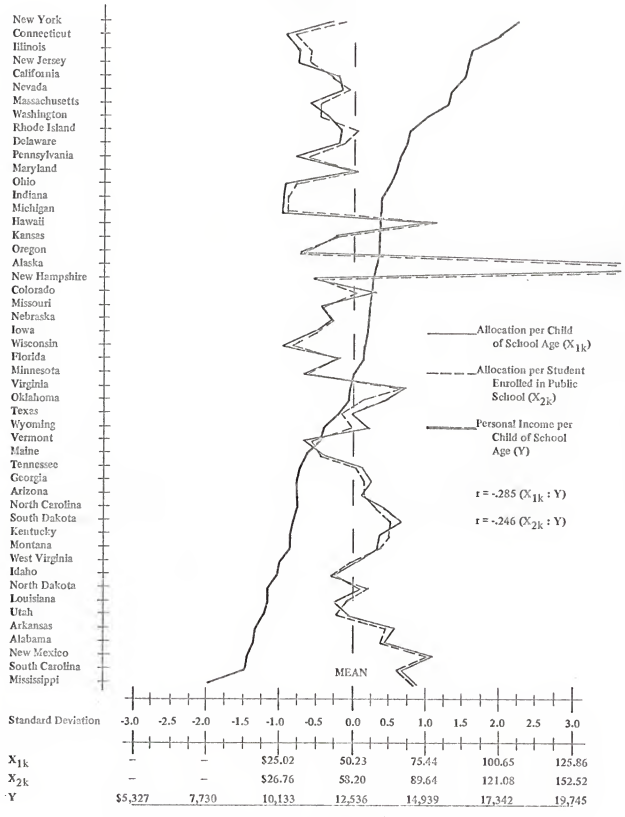


FIGURE 11

STATE-BY-STATE COMPARISON OF COMBINED PROGRAMS ALLOCATIONS AND PERSONAL INCOME PER CHILD OF SCHOOL AGE

found between X_{1k} and Y at level .05 is only minimally significant. (The relation was not significant at the .01 level.) Additional support for this observation is found when one notes that the inverse relation of -.246 between variables X_{2k} and Y was indicated as not significant at either the .01 or .05 level.

A comparison of the two X variables reveals little difference in their deviations throughout the chart. This also was the indication of the t-test which revealed no significant difference between the means of these variables. Thus additional support is provided for the analysis presented in the preceding paragraph.

The reader should note, however, that the coefficients derived from the rank-order method indicated a substantially greater degree of inverse relation between both X variables and Y than those derived from the product-moment method. In fact, if the product-moment coefficients had revealed as much inverse relation as those obtained from the rank-order method, there would be little reason to question their significance.

Comparison of Rank-Order and Product-Moment Coefficients

In the "Study Design" section of Chapter I, the writer indicated that both the rank-order and the product-moment methods of deriving correlation coefficients would be used in correlating allocations data (X variables) with personal income per child data (Y variable). The reason given for the

use of both methods was to discover if different results would be obtained. In this section, the differences in these results are presented and discussed.

X_1 Variables and Y Variables

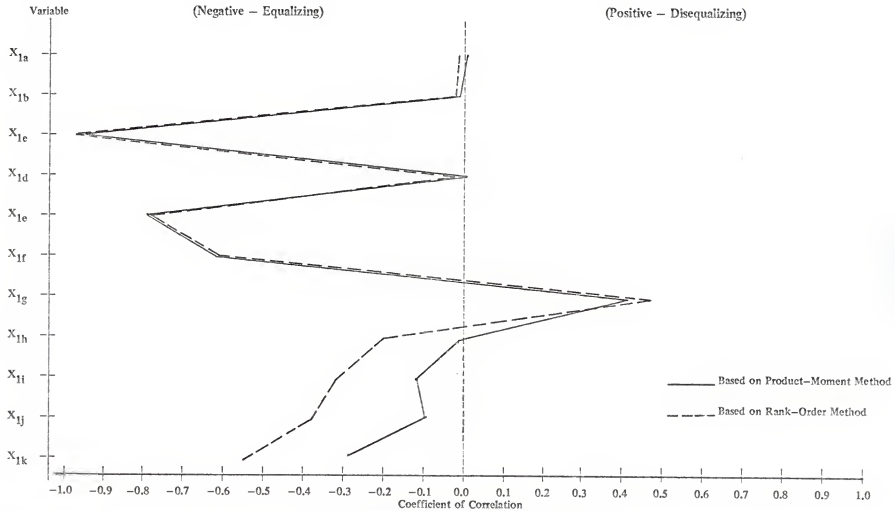
When the separate and combined program allocations per child of school age (X_1 variables) were correlated with personal income per child of school age (Y), certain similarities and differences in results were indicated from the use of the two different methods. These are demonstrated in Figure 12, near the end of this section.

Analysis of Figure 12 indicates that for five of the eleven pairs of correlations between X_1 variables and Y, rather different results were obtained from use of the two different methods. The X_1 variables affected are (1) X_{1d} -- NDEA Title V-A; (2) X_{1h} -- ESEA Title III; (3) X_{1i} -- ESEA Title V; (4) X_{1j} -- ESEA Title VI; and (5) X_{1k} -- the ten programs combined.

Of interest, one can note that in each of the five sets of correlations, the rank-order method indicated a greater degree of inverse relation than did the product-moment method.

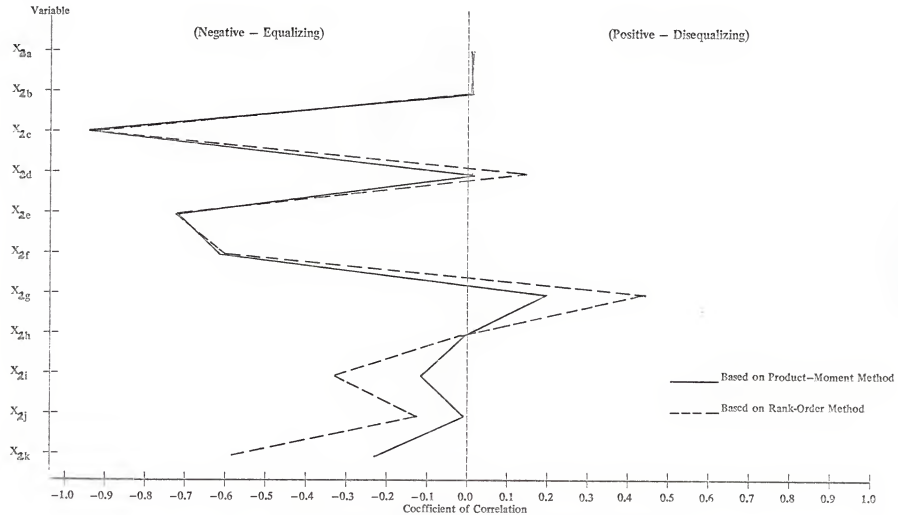
X_2 Variables and Y Variables

When the separate and combined program allocations per student enrolled in public school (X_2 variables) were correlated with personal income per child (Y), certain similarities and differences in results were indicated from the



Extent of Nationwide Relations between Allocations per Child of School Age and Personal Income

FIGURE 12



Extent of Nationwide Relations between Allocations per Student Enrolled in Public School and Personal Income

FIGURE 13

use of the two different methods. These are demonstrated in Figure 13.

Analysis of Figure 13 indicates that for four of the eleven pairs of correlations between X_2 variables and Y, rather different results were obtained from use of the two different methods. The X_2 variables affected are (1) X_{2g} -- ESEA Title II; (2) X_{2i} -- ESEA Title V; (3) X_{2j} -- ESEA Title VI-A; and (4) X_{2k} -- the ten programs combined.

In each of these four correlations, the rank-order method indicated a greater degree of relation (either direct or inverse) than was derived from the product-moment method.

CHAPTER IV

EFFECTS OF ALLOCATION PROCEDURES ON EQUALIZING OR DISEQUALIZING TENDENCIES OF THE PROGRAMS

The data presented and discussed in Chapter II provide pertinent information about the legislative origin, intent, and provisions (including allocation procedures) of each of the ten aid programs. In Chapter III, data were presented and discussed relative to the equalizing or disequalizing tendencies of the programs.

The purpose of Chapter IV is to identify and describe certain features in the legislative provisions and allocation methods which contribute to the extent of the equalizing or disequalizing tendencies (inverse or direct relations) of the ten aid programs.

Public Law 81-874

Data presented in Chapter III indicated there is no significant relation between the allocation of P. L. 81-874 funds and the relative abilities of the states to support public education, as measured by personal income per child of school age. However, there are some rather obvious extremes among the varying amounts of the allocations to the states.

Based on the information presented in Chapter II, the prescribed procedures for allocating funds apparently play

a significant role in influencing both of the results mentioned above. In brief, analysis of the legislative provisions and allocation procedures revealed that funds are distributed to local school districts on the basis of the number of enrolled students who meet the prescribed criteria for qualifying as pupils who "federally affect" or "impact" these districts. No attention is given in the allocation procedures to the relative abilities of either school districts or states in regard to whether they receive assistance from the program. However, "entitlements" of affected districts may vary, depending on student eligibility classifications and whether it is more advantageous for a district to be paid on the basis of its local expenditures, average state expenditures, or the average expenditures for the nation.

As a result, although relative ability is not in either inverse or direct relation to the allocation of P. L. 81-874 funds on a nationwide basis, it is possible for districts of certain states with greater relative wealth to receive greater shares of funds from the program. Examples of this were seen quite clearly in the instances of Nevada, Maryland, Hawaii, and Alaska. All of these states are well above the mean in personal income per child.

Public Law 81-815

Data presented in Chapter III indicated there is no significant relation between the allocation of P. L. 81-815 funds and the relative abilities of the states to support

public education, as measured by personal income per child of school age. However, as was the case with P. L. 81-874, there are some rather obvious extremes among the varying amounts of the allocations to the states.

Based on the information presented in Chapter II, the prescribed procedures for allocating funds seem to be responsible for both of the results mentioned above. In brief, analysis of the legislative provisions and allocation procedures revealed that funds are obligated only in school districts where the number of federally connected children (as determined by prescribed criteria) is presenting a financial burden to the extent that minimum school facilities cannot be provided through utilization of all available state and local funds. Obviously, this distribution procedure includes no built-in minimums for states. Also, it does not include a specific feature assuring greater shares of funds to poorer states. It is entirely possible for some states (nine states in 1968-69) to receive no funds through the program.

Finally, although relative ability is not in either direct or inverse relation to the obligation (allocation) of P. L. 81-815 funds on a nationwide basis, it is possible for certain states with greater relative wealth to receive greater shares of funds from the program. As examples, the greatest extremes in amounts of funds received (per child of school age and per student enrolled in public schools) in 1968-69 were found in the states of Hawaii, Alaska, and

Colorado. All three of these states are well above the mean in personal income per child.

NDEA Title III

Data presented in Chapter III indicated there is a very significant inverse relation between NDEA Title III funds allocated and the relative abilities of the states, as measured by personal income per child of school age. In fact, the extent of this relation was found to be the greatest of any of the ten programs studied.

Based on the information presented in Chapter II, the features in the allocation procedures providing for funds to be allocated to the states on the basis of their relative school age populations, weighted by their relative personal incomes per child, seem to have resulted in a very definite equalizing tendency for the program. This appears to be true even though the legislation also provides that no state will receive more than twice as much per child of school age as the state receiving the smallest amount per child of school age.

Yet attention should again be called to the fact that the NDEA Title III program is a dollar-for-dollar matching program. Poorer states obviously would have greater difficulty in matching their allocations than would the wealthier states. Thus, for at least some of the states, the extent of the equalizing (inverse) relation nationwide could be offset somewhat by the amount of state and/or local effort required to match funds in order to receive assistance from

this categorical aid program. This is especially important if states are unable to provide the funds needed to match their Federal allocations.

NDEA Title V-A

Data presented in Chapter III indicated there is no significant relation between the allocation of NDEA Title V-A funds and the relative abilities of the states, as measured by personal income per child. However, as shown previously, there are important extremes in the allocations received by certain states.

As included in the information presented in Chapter II, the allocation procedure for this program includes two key features: (1) funds are allocated on the basis of the states' relative school age populations; and (2) each state is assured a minimum allocation of $50,000. The second feature ($50,000 minimum) probably is responsible for the extreme deviations in the allocations of certain states. That is, in a program this size ($17,000,000), the states with the smallest populations are assured of a relatively greater share of the funds. This is the case because their allocations would have been less than the assured minimum if the amount they received had been based solely on relative school age population. Also, the minimum may have an equalizing tendency for some small states depending on the relative ability of the individual state.

Another important result of the guaranteed minimum is that comparatively large states (poor or wealthy) may find

the amount of their allocations reduced in order to provide the minimum guaranteed to all states. This kind of result may have either an equalizing or disequalizing tendency for an individual state, depending on its relative ability.

It is possible for allocations based solely on the relative school age populations of the states to show either equalizing or disequalizing tendencies because of relations existing between variables other than those treated in this study. This would appear to be true even though the procedure itself is not designed specifically to compensate or penalize states according to relative ability. Necessarily, it seems safest to assume that any greater or smaller relation which might have resulted nationwide from this feature of the allocation procedure was offset by the provision for the $50,000 minimum.

As in the case of NDEA Title III, the Title V-A program is a dollar-for-dollar matching program. Therefore, the amount of financial effort required of the poorer states to match Federal dollars could result in a greater tendency of the program toward disequalization than is indicated by the extent of the relations derived. This provision assumes even greater importance if some states are unable to provide the funds needed to match their allocations.

Vocational Education Act

Data presented in Chapter III indicated there is a significant inverse relation between the allocation of funds from the Basic Grants Program of the Vocational Education

Act and the relative abilities of the states, as measured by personal income per child. The extent of the relation found was second only to that derived from correlating NDEA Title III allocations with ability.

Based on the information presented in Chapter II, the extent and significance of the inverse relation found for this program would seem to result (at least in large part) from a specific feature in the allocation procedure. That is, the allotment ratio for any state is set at 1.00 minus the product of 0.50 and the state's percentage of the total per capita personal income for the nation.

The provisions relating to the number of persons in the various age groups needing vocational education and the establishment of a maximum and a minimum in the allotment ratios of the states would appear to have a tendency to reduce the extent of the inverse relation that might result if the allocation procedure were based solely on relative per capita income.

Also, as noted previously, program funds are allocated on a dollar-for-dollar matching basis. Necessarily, poorer states are required to make a greater financial effort to provide the dollars needed to match the Federal funds allocated to them. Thus, for some states at least, the extent of the equalizing (inverse) relation nationwide could be offset somewhat by the amount of local effort required to match the Federal dollars.

ESEA Title I

Data presented in Chapter III indicated there is a significant inverse relation between ESEA Title I funds allocated and the relative abilities of the states, as measured by personal income per child of school age. However, some of the differences in the amounts of allocations for certain states suggest there are positive and negative extremes of sufficient importance to be noted.

As presented in Chapter II, basic Title I allocations are computed on the basis of counties. The number of eligible children in a county is multiplied by one-half the state or national average per pupil expenditure, whichever is higher. Essentially, the eligibility of children is based on the number of school age children who are from families with annual incomes below the established low-income criterion. Thus, it is through the use of the low-income criterion that some recognition is given in the allocation procedure to the relative abilities of the states.

The same feature in the allocation procedure partly accounts both for the fact that the extent of the inverse relation is not greater and for the extremes mentioned previously. To illustrate, the state of New York ranks number one in relative ability; i.e., New York has the highest amount of personal income per child of school age and is 2.24 standard deviations above the mean in that category. Nevertheless, New York's Title I allocation per child and allocation per student enrolled are, respectively, 0.66 and

0.96 standard deviations above the mean of state allocations. Conversely, Utah ranks as number 47 in ability, at 1.26 standard deviations below the mean, and its allocations are respectively 1.12 and 1.20 standard deviations below the mean.

Based on the kinds of data illustrated above, one can observe that the established low-income criterion of $3,000 serves to produce a significant equalizing tendency overall, but, for certain individual states, it can contribute to a disequalizing tendency for the program. It is quite possible that a state could be relatively poor and have comparatively few families falling beneath the low-income criterion. Another state could be relatively wealthy and have comparatively greater numbers of families beneath the low-income standard. If this is true, additional clarification is given to the reasons for the findings reported above.

Overall, the writer encountered difficulty in trying to determine the real importance of the feature in the allocation procedure which provides for the amount of the allocation to be based in part on the state or national average expenditure, whichever is higher. States expending at rates greater than the national average obviously would benefit to a greater extent from the program. Necessarily, one could assume that this feature does contribute to the kind and extent of variations found among certain states. As a result, it may influence the extent of the inverse relation.

ESEA Title II

Data presented in Chapter III indicated a significant direct (positive) relation between ESEA Title II allocations per child of school age and the relative abilities of the states, as measured by personal income per child. Also, the data indicated a direct relation -- but not a significant one -- between allocations per student enrolled in public schools and relative abilities of the states.

Information was presented in Chapter II which indicated that ESEA Title II funds are allocated to the states on the basis of their relative numbers of students enrolled in public and private schools. Of the ten programs studied, this allocation procedure is the only one which distributes funds specifically on the basis of public and private school enrollment.

This procedure apparently accounts not only for the kind and extent of the relations mentioned above, but it also appears to be at least in part responsible for some important differences and extremes in the allocations of certain states, as shown in the data. Support is found for this analysis when one notes that in all of the other programs studied, the various procedures used in allocating funds did not produce another instance when either of the two ways of treating the allocations was shown to have a significant disequalizing (direct) relation to relative ability.

When allocations were examined on the basis of numbers of students enrolled in public schools, the extent of the

direct relation to relative ability was found to be substantially less. Although the writer is unable to account completely for this rather interesting difference in the findings, the fact that some states have appreciably higher percentages of their school age population enrolled in private schools could be seen as producing differences between the two ways of examining allocations. That is, in states with comparatively greater percentages of their students enrolled in public schools, the total number enrolled therein would be closer to the number of children in the school age population of these states than would be the case in states with comparatively greater percentages of their students enrolled in private schools. Thus, by allocating funds on the basis of enrollment in public and private schools, the ESEA Title II allocation procedure results in funds being distributed in a way that more closely accounts for the total number of children of school age in several of the states.

If the above statements are assumed to represent an accurate assessment of the data, the significant direct relation found between ESEA Title II allocations per child of school age and the relative abilities of the states may be attributed (at least in part) to the distribution pattern among the states produced by the allocation procedure.

ESEA Title III

Data presented in Chapter III indicated there is no significant relation nationwide between ESEA Title III

allocations and the relative abilities of the states, as measured by personal income per child. However, there are several states for which rather extreme deviations from this overall indication can be noted.

As presented in Chapter II, the total funds appropriated for Title III are allocated to the states first through a flat grant of $200,000 to each state. Half of the remaining funds are then distributed to states on the basis of their relative percentages of the nation's school age population. The other half is distributed on the basis of the states' relative percentages of the nation's total population.

The feature of the allocation procedure providing a flat grant of $200,000 obviously benefits states with comparatively small populations (whether wealthy or poor) to a greater extent than the larger states. In many respects, this may serve as a built-in minimum which would contribute to the rather extreme positive deviations in the allocations of some states. Also, because small states seem to be rather widely dispersed from the standpoint of relative ability, this feature probably would not contribute in a consistent fashion to either a direct or inverse tendency for this program.

The other features of the procedure also do not seem to lend themselves to specifically taking into account relative ability. However, it is possible that allocations based on either relative school age population or relative total population (or both) could have produced a disequalizing

tendency for the program had they not been weighted by the $200,000 factor. When one notes that ESEA Title II allocations (distributed solely on the basis of numbers of pupils enrolled in both public and private schools) resulted in a disequalizing tendency, some support is found for this analysis. However, the validity of this comparison rests on the unfounded assumption that the states' relative school age populations and/or total populations are statistically similar to the degree that such comparison can be made.

Nevertheless, the three features in the allocation procedure apparently counteract one another to the extent that no significant tendency toward equalization or disequalization is produced when the procedure is used to distribute funds for this size program.

ESEA Title V

Data presented in Chapter III indicated there is no significant relation between the allocation of ESEA Title V funds and the relative abilities of the states, as measured by personal income per child of school age. However, as found in other programs, there are some rather extreme deviations in the allocations of certain states which are of sufficient importance to be noted.

In Chapter II, information presented about Title V reveals that funds appropriated for the basic grants program are allocated to the states in two ways. First, 40 percent of the available funds is apportioned equally among the states. The remaining 60 percent is apportioned according

to the states' relative percentages of the total number of public school pupils in the nation.

The 40 percent provision assumes some of the same characteristics as those of the established minimum or basic grant procedures. That is, states with comparatively smaller populations (wealthy or poor) would derive greater benefits. Necessarily, this feature is not specifically designed to take into account a relative ability factor. Thus, it would serve to equalize or disequalize differently in different states. Also, because the smaller states are rather widely dispersed in their relative abilities, this part of the allocation procedure probably reduces any equalizing or disequalizing tendency of the funds allocated through the 60 percent provision -- if either of these tendencies was found to exist.

In other programs having allocation procedures which include an established minimum, the extent to which extreme deviations occur in the allocations of certain states appears to be specifically related to the amount of the minimum in comparison to the total funds available for allocation. In the case of Title V, the 40 percent provision would permit flexibility for the guaranteed portion of the total available for allocation. Necessarily, it would affect the relation between allocations and relative ability in essentially the same way regardless of the size of the total amount available for allocation.

ESEA Title VI-A

Data presented in Chapter III indicated there is no significant relation between ESEA Title VI-A allocations and the relative abilities of the states, as measured by personal income. However, there are some of the same kinds of rather extreme deviations in the allocations to certain states which are found in other programs. In fact, there are some obvious similarities between the data for Title VI-A and the data for ESEA titles III and V, discussed in the two preceding sections.

In Chapter II, the information presented about ESEA Title VI-A revealed that the funds appropriated for this program are allocated to the states through a procedure which includes two factors. Available funds are distributed to states on the basis of their relative percentages of the nation's population, age 3-21. However, the Act provides that no state will receive less than $100,000.

The $100,000 guarantee can be seen as either equalizing or disequalizing, depending on its ratio to the total funds available, the size of the individual state, and the relative ability of the individual state. In noting the size of the Title VI-A program for the year studied, there seems to be good reason to believe that this established minimum did contribute to the indication of no relation between allocated funds and relative ability. That is, the extreme deviations in allocations the guarantee helped produce serve as equalizing factors in some states and

disequalizing factors in others because of differences in the relative abilities of these states. As a result, when this feature of the procedure is combined with the provision allocating funds on the basis of states' relative populations age 3-21, no overall relation is indicated between program allocations and relative ability for this size program.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This chapter has three separate but interrelated purposes: (1) to provide a summary review of the study in retrospect; (2) to cite the conclusions drawn from the study; and (3) to present some of the implications of the study.

Summary

The emphasis of the study was upon ten Federal programs of financial assistance, with special attention given to the extent of an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds from the programs and the relative financial abilities of the states to support public elementary and secondary education. Programs studied were P. L. 81-874; P. L. 81-815; titles III and V-A of the National Defense Education Act; the basic grants provision of the Vocational Educational Act; and titles I, II, III, V, and VI-A of the Elementary and Secondary Education Act.

Each program allocation, as well as the combined total of the allocations, was treated as two different variables; i.e., allocations per child of school age and allocations per student enrolled in public schools. Personal income per child of school age was used as the indicator of relative financial ability.

Crucial to the study were the definitions selected for the terms "equalization" and "equalizing relation." These definitions are restated below.

Equalization, in this study, is a provision in an aid program, either in the allocation or matching, or both, which gives some statutory recognition to underlying differences in the states' relative capacities (abilities) to raise funds from their own resources for financing a joint Federal-state program of education, in order to achieve a more uniform standard throughout the nation.

Equalizing relation, in this study, is an inverse relation between a selected indicator of financial ability to support education (e.g., personal income per child of school age) and the allocation of funds from a Federal aid program (e.g., allocation of ESEA Title I funds per child of school age).

In Chapter II, information was presented concerning the rationale, intent, and provisions (including allocation procedures and/or formulae) of the ten programs. Data were presented, analyzed, and discussed in Chapter III relative to the equalizing tendencies of the program allocations. Allocations data were for fiscal year 1968-69; estimated school age population data were for July 1, 1968; public school enrollment data were for fall, 1968; and estimated personal income data were for the first quarter of 1969. Allocations data were obtained directly from personnel in the United States Office of Education. In Chapter IV, an

effort was made to identify certain features of the legislative provisions and/or allocations procedures which seem to contribute to the equalizing or disequalizing tendencies of the programs presented and analyzed in Chapter III.

Conclusions

Earlier, in an attempt to clarify the emphasis of the study and the statement of the problem to be investigated, five subproblems were identified. The subproblems were posed in the form of questions to be answered, to the extent possible, through the study. For the purpose of citing the conclusions drawn from the study, these questions are restated and the conclusions are presented in the form of answers or statements related to the questions.

Conclusions Concerning Subproblem Number One

In terms of the provisions authorized in the legislation (including the procedures for allocating funds), what is the intent of the ten aid programs; and how do these provisions contribute to the tendencies of the program allocations to equalize or disequalize in relation to the relative financial abilities of the states? Following are the conclusions reached about subproblem number one:

1. As would be expected and was preconcluded in Chapter I, the intent of each of the ten programs is to provide one form or another of categorical aid; i.e., special problem-centered assistance to the states or to school districts within the states.

2. With the possible exception of NDEA Title III, each one of the programs includes a feature (or features) in its legislative provisions or allocation procedure which produces a tendency in the allocation to "equalize" for some individual states and to "disequalize" for others without regard to the kind or extent of the nationwide relation between the allocation and relative ability.

3. Of the ten programs studied, only NDEA Title III and the Vocational Education Act include specific features in their legislative provisions and allocation procedure which demonstrate a consistent form of recognition of the underlying differences in the relative abilities of almost all of the states.

4. The legislative provisions and allocation procedure of ESEA Title I include features which allow some recognition of the underlying differences in the relative financial abilities of the states. However, these procedures do not seem to be as specific or to provide the amount of consistency for the states as those found in NDEA Title III and the Vocational Education Act. Conversely, ESEA Title I does not include in its allocation procedure the dollar-for-dollar matching requirement found in both of the other programs. Thus it is possible that ESEA Title I ultimately may have as much (or more) equalizing tendency overall as either NDEA Title III or the Vocational Education Act.

5. Of the ten programs studied, only ESEA Title II includes an allocation procedure which produced a nationwide

tendency in the program allocations to bear a significant disequalizing (direct) relation to the relative abilities of the states.

Conclusions Concerning
Subproblem Number Two

In regard to each separate aid program, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per child of school age (age 5-17) and the amount of personal income per child of school age? Following are the conclusions reached about subproblem number two:

1. For NDEA Title III, the basic grants provision of the Vocational Education Act, and ESEA Title I, there is a significant equalizing relation nationwide between the allocation of funds per child of school age and the amount of personal income per child of school age. The extent of the equalizing relation for NDEA Title III is greatly significant. For the Vocational Education Act, the extent of the inverse relation can be described as definitely strong. The inverse relation for ESEA Title I appears to be within the range of moderate to strong.

2. For P. L. 81-874, P. L. 81-815, NDEA Title V-A, ESEA Title III, ESEA Title V and ESEA Title VI-A, there is no significant equalizing (inverse) or disequalizing (direct) relation nationwide between the allocation of funds per child of school age and the amount of personal income per child of school age.

3. For ESEA Title II, there is a significant disequalizing (direct) relation between the allocation of funds per child of school age and the amount of personal income per child of school age. Although the extent of the direct relation is not as great as the inverse relations found for three of the programs, it does appear to be sufficiently strong to warrant being described as a disequalizing tendency.

4. The kind or extent of the relations found between any of the program allocations per child of school age and the relative financial abilities of the states are not always or consistently applicable to individual states.

Conclusions Concerning
Subproblem Number Three

In regard to the combined allocations from the ten aid programs, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per child of school age and the amount of personal income per child of school age? Following are the conclusions reached about subproblem number three:

1. There is an inverse relation between the combined programs allocation of funds per child of school age and the amount of personal income per child of school age. The extent and significance of the inverse relation appears to be described best as only slightly equalizing, if indeed one can support that a significant relation does exist. (The test of significance applied to the product-moment coefficient indicated that the inverse relation of -.285 is significant at the .05 level but not at the .01 level).

2. The inverse relation between the combined allocations per child of school age and the relative abilities of the states, or the extent of the relation on a nationwide basis, are not always or consistently applicable to individual states.

Conclusions Concerning
Subproblem Number Four

In regard to each separate aid program, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per student enrolled in public schools and the amount of personal income per child of school age? Following are the conclusions reached about subproblem number four:

1. For NDEA Title III, the basic grants provision of the Vocational Education Act, and ESEA Title I, there is a significant equalizing relation nationwide between the allocation of funds per student enrolled in public schools and the amount of personal income per child of school age. For NDEA Title III, the extent of the inverse relation appears to be greatly significant. The extent of the inverse relation for the Vocational Education Act can be described as definitely strong. For ESEA Title I, the inverse relation seems to be within the range of moderate to strong.

2. For P. L. 81-874, P. L. 81-815, NDEA Title V-A, and titles III, V, and VI-A of ESEA, there is no significant equalizing (inverse) or disequalizing (direct) relation nationwide between the allocation of funds per student

enrolled in public schools and the amount of personal income per child of school age.

3. For ESEA Title II there is indicated a rather small amount of direct relation between its allocations per student enrolled in public schools and the amount of personal income per child of school age. However, the extent of this direct relation is not nearly as great as when the allocations were treated on the basis of the number of school age children. It does not seem to be of sufficient significance to warrant being described as disequalizing on a nationwide basis.

4. The kind or extent of the relations found between any of the program allocations per student enrolled in public schools and the relative financial abilities of the states are not always or consistently applicable to individual states.

Conclusions Concerning
Subproblem Number Five

In regard to the combined allocations from the ten programs, to what extent is there an equalizing (inverse) or disequalizing (direct) relation between the allocation of funds per student enrolled in public schools and the amount of personal income per child of school age? Following are the conclusions reached about subproblem number five:

1. There is an inverse relation between the combined programs allocation of funds per student enrolled in public schools and the amount of personal income per child of school age. The extent of this inverse relation is small, and it would not seem to be sufficiently significant to warrant being described as equalizing.

2. The inverse relation between the combined allocations per student enrolled in public schools and the relative abilities of the states, and the extent of the relation on nationwide basis, are not always or consistently applicable to individual states.

Implications of the Study

This section includes some of the implications of the study. That is, some of the things suggested by the findings and inferences made by the writer are presented in this section.

Implication Number One

There are rather strong indications that the Federal government frequently has given little, if any, specific attention to the relative financial abilities of the states through the design and enactment of legislation to aid education.

Implication Number Two

The allocation procedures or formulae through which funds from various Federal aid programs are distributed to the states may not produce the kinds of benefits and results intended because of the differences in the amount of funds authorized for a given program and the amount of funds finally appropriated for allocation. In other words, a given allocation procedure or formula can be more appropriate for allocating an amount of one size than it is for allocating an amount either smaller or larger in size. This could be especially

significant in the programs which include an established minimum amount or percentage of the funds for equal distribution among the states.

Implication Number Three

There is a considerable amount of duplication in the legislative provisions and emphases of several of the programs. This seems to be especially true in the number and extent of the provisions for disadvantaged and handicapped children. Necessarily, there is a rather strong possibility that difficulties in coordinating the various program provisions aimed at improving education for these children could result in a reduction of the overall benefits derived. Also, this amount of duplication can produce too much emphasis on one problem, at the expense of other vitally needed programs and services.

Implication Number Four

There is need for a thorough evaluation of the possible disequalizing effects of program allocation procedures which require the matching of Federal funds by state and local education agencies. First, because of the varying financial abilities of the states, it is possible that the less wealthy states may not always be able to take full advantage of the funds available to them. Also, one may question whether in some instances the local and/or state funds used to match the Federal allocation could be used to better advantage by servicing needs other than those specified in the categorical matching program.

Implication Number Five

There is need for re-assessment and future continuous evaluation of the rationale, intent, and provisions of all of the programs studied. In other words, it should be determined whether the problems and purposes for which the programs were designed originally still merit priority attention. If so, the effectiveness of the existing legislative provisions in satisfying the legislative intent should be determined. As examples, the need for continuation of the present programs of aid to impacted areas (P. L. 81-874 and P. L. 81-815) could be greater, less, or of a different kind than is now serviced by these programs.

Implication Number Six

Through its provisions for several different categorical aid programs within the framework of one act, the Elementary and Secondary Education Act could be viewed as representing the nearest thing to general aid provided by the Federal government at the time of this study. However, because of the considerable specificity of purpose in each of the titles, as well as the varying procedures and formulae used in allocating funds for the programs, the net result probably is little more than a substantial addition to the number of special purpose programs already existing prior to its enactment.

General Implication and Recommendation from the Study

In the introduction to the study, the writer mentioned that equalization is a concept to which a wide assortment of

definitions can be applied. In any definition selected for use (including the one used in this study), there can be found a number of important variables to which no attention was given in this study. The number of these variables is too large and their relative importance is too debatable to permit a definitive listing of them here. Nevertheless, a mere acknowledgment of their existence should provide sufficient evidence of the need for additional study of the equalization and/or disequalization tendencies of Federal programs to aid education. In this regard, the greater the commitment of Federal tax revenues to education, the greater will be the need for such studies.

In terms of the variables selected for the purposes of this study -- if one assumes that the allocation of Federal funds to aid education should bear an inverse relation to the financial abilities of the states -- the rationale, intent, and allocation procedures of the programs studied seem to have been no more than minimally successful. Importantly, however, one cannot say that there has been an overall tendency of the programs to disequalize in relation to financial ability.

Finally, it does seem possible that categorical aid, a problem-centered approach to assistance, does not always lend itself to specific recognition of the underlying differences in the relative abilities of the states. Thus, in order for a specific and consistent form of such recognition to be included in the legislation authorizing Federal aid to education, a better solution may be found in a program offering a more general kind of financial assistance.

APPENDIX A

ESTIMATED SCHOOL AGE POPULATION (5-17), JULY 1, 1968,
AND PUPILS ENROLLED IN FULL-TIME PUBLIC ELEMENTARY AND SECONDARY
SCHOOLS, FALL, 1968

Table 12

Table 12

State	School Age Population	Students Enrolled in Public Schools
Alabama	962,000	831,661
Alaska	90,000	71,469
Arizona	482,000	411,070
Arkansas	510,000	453,314
California	4,930,000	4,581,600
Colorado	554,000	524,347
Connecticut	748,000	632,208
Delaware	149,000	124,666
Florida	1,550,000	1,355,846
Georgia	1,242,000	1,103,306
Hawaii	211,000	172,230
Idaho	202,000	178,900
Illinois	2,800,000	2,273,517
Indiana	1,367,000	1,205,252
Iowa	739,000	657,791
Kansas	604,000	522,211
Kentucky	856,000	698,790
Louisiana	1,085,000	864,765
Maine	261,000	232,127
Maryland	1,020,000	858,766
Massachusetts	1,376,000	1,112,461
Michigan	2,454,000	2,123,573
Minnesota	1,030,000	895,332
Mississippi	674,000	581,734
Missouri	1,200,000	1,056,100
Montana	203,000	172,768

Table 12 (continued)

	School Age Population	Students Enrolled in Public Schools
Nebraska	377,000	328,685
Nevada	120,000	118,236
New Hampshire	180,000	145,706
New Jersey	1,774,000	1,421,455
New Mexico	314,000	272,567
New York	4,368,000	3,411,000
North Carolina	1,346,000	1,195,258
North Dakota	185,000	148,965
Ohio	2,834,000	2,384,160
Oklahoma	611,000	604,017
Oregon	521,000	489,825
Pennsylvania	2,935,000	2,309,700
Rhode Island	226,000	173,393
South Carolina	745,000	648,694
South Dakota	188,000	167,205
Tennessee	1,000,000	883,500
Texas	2,882,000	2,704,000
Utah	317,000	301,116
Vermont	119,000	99,649
Virginia	1,195,000	1,055,606
Washington	845,000	804,205
West Virginia	459,000	409,639
Wisconsin	1,175,000	954,243
Wyoming	90,000	86,013
50 States	52,105,000	44,812,642

Sources: Column 1 from National Education Association, Rankings of the States, 1969 Research Report 1969-R1 (1969), 8. Column 2 from U.S. Office of Education, Fall 1968 Statistics of Public Elementary and Secondary Day Schools (March, 1969), 14.

APPENDIX B

ESTIMATED PERSONAL INCOME BY STATE
FIRST QUARTER, 1969

Table 13

Table 13

State	Total Pers. Inc. (in millions)	Personal Inc. per Child of Sch. Age	Rank
Alabama	$ 8,772	$ 9,119	47
Alaska	1,196	13,289	19
Arizona	5,189	10,766	36
Arkansas	4,669	9,155	46
California	80,426	16,314	5
Colorado	7,316	13,206	21
Connecticut	13,036	17,427	2
Delaware	2,173	14,584	10
Florida	20,046	12,933	26
Georgia	13,381	10,774	35
Hawaii	2,840	13,460	16
Idaho	2,039	10,094	42
Illinois	46,398	16,571	3
Indiana	18,573	13,587	14
Iowa	9,636	13,039	24
Kansas	8,110	13,427	17
Kentucky	8,859	10,349	39
Louisiana	10,536	9,711	44
Maine	2,914	11,165	33
Maryland	14,519	14,234	12
Massachusetts	21,676	15,753	7
Michigan	33,182	13,522	15
Minnesota	12,943	12,566	27
Mississippi	5,249	7,788	50
Missouri	15,781	13,151	22
Montana	2,095	10,320	40

Table 13 (continued)

State	Total Pers. Inc. (in millions)	Personal Inc. per Child of Sch. Age	Rank
Nebraska	$ 4,939	$13,100	23
Nevada	1,904	15,867	6
New Hampshire	2,381	13,228	20
New Jersey	29,076	16,390	4
New Mexico	2,818	8,975	48
New York	78,367	17,941	1
North Carolina	14,487	10,763	37
North Dakota	1,799	9,724	43
Ohio	39,432	13,914	13
Oklahoma	7,604	12,445	29
Oregon	6,980	13,397	18
Pennsylvania	42,334	14,424	11
Rhode Island	3,326	14,717	9
South Carolina	6,650	8,926	49
South Dakota	1,959	10,420	38
Tennessee	10,877	10,877	34
Texas	34,696	12,039	30
Utah	3,013	9,505	45
Vermont	1,370	11,513	32
Virginia	14,965	12,523	28
Washington	12,648	14,968	8
West Virginia	4,672	10,179	41
Wisconsin	15,234	12,965	25
Wyoming	1,052	11,689	31
50 States	714,137	13,706	(nat'l ave.)

Sources: Column 1 from information in U.S. Department of Commerce, Office of Business Economics, Survey of Current Business Vol. 49, No. 7 (July, 1969), p. 8. Column 2 obtained by division of data in Column 1 by data in Appendix A.

APPENDIX C

FEDERAL AID PROGRAM ALLOCATIONS TO STATES -- TOTAL, PER CHILD OF SCHOOL AGE, AND PER STUDENT ENROLLED IN PUBLIC SCHOOLS -- FISCAL YEAR 1968-69

Tables 14 - 24

Table 14

P. L. 81-874 Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 9,530,000	$ 9.91	30	$11.46	29
Alaska	13,379,000	148.66	1	187.20	1
Arizona	9,059,000	18.79	12	22.04	10
Arkansas	2,696,000	5.29	35	5.95	35
California	78,042,000	15.83	14	17.03	15
Colorado	13,291,000	23.99	7	25.35	8
Connecticut	3,429,000	4.58	37	5.42	37
Delaware	1,922,000	12.90	21	15.42	19
Florida	17,351,000	11.19	27	12.80	27
Georgia	16,421,000	13.22	19	14.88	20
Hawaii	9,117,000	43.21	2	52.94	2
Idaho	2,656,000	13.15	20	14.84	21
Illinois	12,724,000	4.54	38	5.60	36
Indiana	4,391,000	3.21	43	3.64	45
Iowa	2,605,000	3.53	42	3.96	43
Kansas	8,534,000	14.13	17	16.34	17
Kentucky	8,731,000	10.20	29	12.49	28
Louisiana	3,431,000	3.16	44	3.97	42
Maine	3,049,000	11.68	24	13.14	25
Maryland	24,846,000	24.36	6	28.93	6
Massachusetts	15,743,000	11.44	25	14.15	23
Michigan	4,574,000	1.86	48	2.15	48
Minnesota	2,923,000	2.84	46	3.26	46
Mississippi	2,615,000	3.88	40	4.50	40
Missouri	8,386,000	6.99	32	7.94	33
Montana	4,444,000	21.89	8	25.72	7

Table 14 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 4,429,000	$11.75	23	$13.47	24
Nevada	3,457,000	28.81	5	29.23	5
New Hampshire	2,138,000	11.88	22	14.67	22
New Jersey	11,933,000	6.73	34	8.39	32
New Mexico	10,127,000	32.25	3	37.15	3
New York	17,641,000	4.04	39	5.17	39
North Carolina	11,198,000	8.32	31	9.36	31
North Dakota	2,501,000	13.52	18	16.78	16
Ohio	10,561,000	3.73	41	4.43	41
Oklahoma	12,140,000	19.87	10	20.10	13
Oregon	2,535,000	4.87	36	5.18	38
Pennsylvania	8,953,000	3.05	45	3.88	44
Rhode Island	3,578,000	15.83	15	20.63	12
South Carolina	8,446,000	11.34	26	13.02	26
South Dakota	3,587,000	19.08	11	21.45	11
Tennessee	6,566,000	6.56	33	7.43	34
Texas	29,659,000	10.29	28	10.96	30
Utah	6,901,000	21.77	9	22.92	9
Vermont	119,000	1.00	49	1.19	49
Virginia	34,531,000	28.90	4	32.71	4
Washington	12,938,000	15.31	16	16.09	18
West Virginia	413,000	0.90	50	1.01	50
Wisconsin	2,252,000	1.92	47	2.36	47
Wyoming	1,600,000	17.78	13	18.60	14
50 States	492,092,000	9.44(nat'l ave.)		10.98 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 15

P. L. 81-815 Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 372,344	$ 0.38	27.5	$ 0.45	26.5
Alaska	918,641	10.21	1	12.82	1
Arizona	1,095,682	2.27	7	2.67	7
Arkansas	962,669	1.89	9	2.12	9
California	10,880,448	2.21	8	2.37	8
Colorado	2,651,631	4.79	3	5.06	3
Connecticut	--	0.00	46	0.00	46
Delaware	57,508	0.38	27.5	0.46	25
Florida	2,690,023	1.74	12	1.98	11
Georgia	2,306,254	1.86	10	2.09	10
Hawaii	1,726,191	8.18	2	10.02	2
Idaho	80,850	0.40	26	0.45	26.5
Illinois	907,187	0.32	29.5	0.39	29
Indiana	157,850	0.12	35	0.13	34
Iowa	670,028	0.91	20	1.02	20
Kansas	573,750	0.95	19	1.10	19
Kentucky	230,278	0.27	32	0.33	30
Louisiana	351,676	0.32	29.5	0.40	28
Maine	--	0.00	46	0.00	46
Maryland	494,236	0.48	24	0.57	23
Massachusetts	116,046	0.08	36.5	0.10	35.5
Michigan	194,618	0.07	38	0.09	37
Minnesota	--	0.00	46	0.00	46
Mississippi	117,158	0.17	34	0.20	33
Missouri	1,485,317	1.24	15	1.40	15
Montana	844,364	4.16	4	4.88	4

Table 15 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 457,928	$ 1.21	16	$ 1.39	16
Nevada	221,351	1.84	11	1.87	12
New Hampshire	924	0.01	41	0.01	41
New Jersey	798,277	0.45	25	0.56	24
New Mexico	229,219	0.73	21	0.84	20
New York	98,325	0.02	40	0.03	40
North Carolina	1,391,665	1.03	17	1.16	17
North Dakota	--	0.00	46	0.00	46
Ohio	601,890	0.21	33	0.25	32
Oklahoma	194,246	0.31	31	0.32	31
Oregon	--	0.00	46	0.00	46
Pennsylvania	--	0.00	46	0.00	46
Rhode Island	125,400	0.55	23	0.72	21
South Carolina	1,090,261	1.46	14	1.68	14
South Dakota	192,626	1.02	18	1.15	18
Tennessee	53,590	0.05	39	0.06	39
Texas	4,868,563	1.69	13	1.80	13
Utah	1,235,518	3.90	5	4.10	5
Vermont	--	0.00	46	0.00	46
Virginia	3,589,739	3.00	6	3.40	6
Washington	530,390	0.63	22	0.62	22
West Virginia	--	0.00	46	0.00	46
Wisconsin	99,715	0.08	36.5	0.10	35.5
Wyoming	--	0.00	46	0.00	46
50 States	45,655,801	0.88(nat'l ave.)		1.01 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 16

NDEA Title III Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 1,912,419	$ 1.99	1	$ 2.30	2.5
Alaska	118,875	1.32	40	1.66	36
Arizona	796,310	1.65	23	1.93	17.5
Arkansas	1,003,821	1.97	4	2.21	7.5
California	5,479,233	1.11	46	1.19	48
Colorado	821,395	1.48	31.5	1.56	39.5
Connecticut	747,029	1.00	49	1.18	49
Delaware	177,880	1.19	43	1.42	43
Florida	2,321,900	1.49	29.5	1.71	33
Georgia	2,270,381	1.83	13.5	2.05	14
Hawaii	312,639	1.48	31.5	1.81	25
Idaho	369,401	1.83	13.5	2.06	13
Illinois	3,167,500	1.13	45	1.39	45
Indiana	1,987,600	1.45	35	1.64	36.5
Iowa	1,139,207	1.54	25.5	1.73	31.5
Kansas	915,401	1.52	27	1.75	29
Kentucky	1,603,175	1.87	11	2.29	4.5
Louisiana	2,042,550	1.88	10	2.36	1
Maine	450,277	1.73	18	1.93	17.5
Maryland	1,340,335	1.31	41	1.56	39.5
Massachusetts	1,596,540	1.16	44	1.43	42
Michigan	3,488,055	1.42	36	1.64	36.5
Minnesota	1,589,891	1.54	25.5	1.77	27
Mississippi	1,337,107	1.98	2.5	2.29	4.5
Missouri	1,688,053	1.41	37	1.59	38
Montana	347,084	1.71	20	2.00	15.5

Table 16 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 590,443	$ 1.57	24	$ 1.79	26
Nevada	127,065	1.06	47	1.07	50
New Hampshire	271,301	1.51	28	1.86	22
New Jersey	1,858,298	1.05	48	1.30	46
New Mexico	598,144	1.90	9	2.19	9
New York	4,331,103	0.99	50	1.26	47
North Carolina	2,577,099	1.91	7.5	2.15	11.5
North Dakota	343,287	1.86	12	2.30	2.5
Ohio	4,167,681	1.47	33	1.74	30
Oklahoma	1,050,835	1.72	19	1.73	31.5
Oregon	760,161	1.46	34	1.55	41
Pennsylvania	4,073,753	1.39	38	1.76	28
Rhode Island	295,041	1.30	42	1.70	34
South Carolina	1,454,152	1.95	5	2.24	6
South Dakota	364,649	1.94	6	2.18	10
Tennessee	1,905,829	1.91	7.5	2.15	11.5
Texas	5,160,893	1.79	16	1.90	19.5
Utah	572,590	1.81	15	1.90	19.5
Vermont	200,108	1.68	21	2.00	15.5
Virginia	1,992,350	1.67	22	1.88	21
Washington	1,134,343	1.34	39	1.41	44
West Virginia	909,351	1.98	2.5	2.21	7.5
Wisconsin	1,761,101	1.50	29.5	1.84	23
Wyoming	157,631	1.75	17	1.83	24
50 States	75,681,266	1.45(nat'l ave.)		1.68 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 17

NDEA Title V-A Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 315,250	$0.3277	9	$0.3790	19
Alaska	60,000	0.6666	1	0.8395	1
Arizona	147,487	0.3059	50	0.3587	36
Arkansas	165,473	0.3244	13.5	0.3650	30
California	1,560,553	0.3165	32	0.3406	45
Colorado	172,995	0.3122	41	0.3299	49
Connecticut	234,802	0.3139	35	0.3713	24
Delaware	50,000	0.3355	5.5	0.4010	7
Florida	475,164	0.3065	49	0.3504	44
Georgia	393,735	0.3170	29.5	0.3568	40
Hawaii	66,059	0.3130	38	0.3835	17
Idaho	64,750	0.3205	19.5	0.3619	34
Illinois	894,406	0.3194	24.5	0.3934	10
Indiana	431,016	0.3153	34	0.3576	39
Iowa	235,456	0.3186	26	0.3579	38
Kansas	193,924	0.3210	17.5	0.3713	24
Kentucky	274,372	0.3205	19.5	0.3926	11
Louisiana	339,449	0.3128	39	0.3925	12
Maine	82,737	0.3170	29.5	0.3564	41
Maryland	312,960	0.3068	48	0.3644	32
Massachusetts	431,343	0.3134	37	0.3877	14
Michigan	769,811	0.3136	36	0.3625	33
Minnesota	321,136	0.3117	42	0.3586	37
Mississippi	220,413	0.3270	10.5	0.3788	20
Missouri	372,479	0.3103	45	0.3526	43
Montana	64,096	0.3157	33	0.3709	25

Table 17 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 122,306	$0.3244	13.5	$0.3721	22
Nevada	49,960	0.4163	4	0.4225	4
New Hampshire	55,921	0.3106	44	0.3837	16
New Jersey	552,014	0.3111	43	0.3883	13
New Mexico	100,396	0.3197	22	0.3683	28
New York	1,402,273	0.3210	17.5	0.4111	5
North Carolina	435,921	0.3238	15	0.3647	31
North Dakota	58,864	0.3181	28	0.3951	9
Ohio	907,814	0.3203	21	0.3807	18
Oklahoma	200,465	0.3280	8	0.3318	48
Oregon	166,454	0.3194	24.5	0.3398	46
Pennsylvania	934,630	0.3184	27	0.4004	8
Rhode Island	69,988	0.3096	46	0.4036	6
South Carolina	239,702	0.3217	16	0.3695	26
South Dakota	61,480	0.3270	10.5	0.3676	29
Tennessee	326,368	0.3263	12	0.3694	27
Texas	955,233	0.3314	7	0.3532	42
Utah	100,396	0.3167	31	0.3334	47
Vermont	50,000	0.4201	3	0.5017	3
Virginia	381,962	0.3196	23	0.3618	35
Washington	259,983	0.3076	47	0.3232	50
West Virginia	154,028	0.3355	5.5	0.3760	21
Wisconsin	367,246	0.3125	40	0.3848	15
Wyoming	50,000	0.5555	2	0.5813	2
50 States	16,653,270	0.3196(nat'l ave.)		0.3716 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 18

VEA Basic Grants Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 5,755,151	$5.98	12	$6.92	12
Alaska	508,238	5.65	18	7.11	9
Arizona	2,133,895	4.43	38.5	5.19	34
Arkansas	3,319,461	6.51	5	7.32	6.5
California	17,471,789	3.54	48	3.81	50
Colorado	2,452,139	4.43	38.5	4.67	43
Connecticut	2,634,697	3.52	49.5	4.16	49
Delaware	623,244	4.18	42	4.99	38
Florida	7,143,929	4.61	35	5.26	33
Georgia	7,105,908	5.72	15	6.44	18
Hawaii	1,000,869	4.74	31	5.81	27
Idaho	1,202,766	5.95	13	6.72	14
Illinois	10,300,874	3.68	47	4.53	45
Indiana	6,170,769	4.51	37	5.11	35.5
Iowa	4,106,252	5.56	20	6.24	23
Kansas	3,089,082	5.11	24	5.91	25
Kentucky	5,459,534	6.38	9.5	7.81	2
Louisiana	5,453,039	5.03	25	6.30	21
Maine	1,490,962	5.71	16	6.42	19
Maryland	3,966,192	3.89	44	4.61	44
Massachusetts	5,383,109	3.91	43	4.83	39
Michigan	9,284,246	3.78	45	4.37	48
Minnesota	4,942,203	4.80	30	5.51	32
Mississippi	4,298,675	6.38	9.5	7.38	4
Missouri	5,909,451	4.92	27	5.59	30
Montana	1,116,404	5.50	21	6.46	16.5

Table 18 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 2,135,304	$ 5.66	17	$ 6.49	15
Nevada	566,052	4.72	32	4.78	41.5
New Hampshire	941,303	5.23	22	6.46	16.5
New Jersey	6,246,915	3.52	49.5	4.39	47
New Mexico	1,547,049	4.93	26	5.67	28
New York	16,447,902	3.77	46	4.82	40
North Carolina	8,749,892	6.50	6	7.32	6.5
North Dakota	1,270,281	6.87	1	8.52	1
Ohio	12,007,320	4.24	41	5.03	37
Oklahoma	3,699,294	6.05	11	6.12	24
Oregon	2,503,962	4.81	29	5.11	35.5
Pennsylvania	13,607,721	4.66	33.5	5.89	26
Rhode Island	1,087,186	4.81	28	6.27	22
South Carolina	4,590,788	6.16	8	7.07	10.5
South Dakota	1,271,620	6.76	2	7.60	3
Tennessee	6,385,581	6.39	7	7.22	8
Texas	14,936,466	5.18	23	5.52	31
Utah	1,439,960	4.54	36	4.78	41.5
Vermont	704,708	5.92	14	7.07	10.5
Virginia	6,700,866	5.61	19	6.34	20
Washington	3,610,797	4.27	40	4.48	46
West Virginia	3,010,158	6.56	3.5	7.34	5
Wisconsin	5,447,743	4.66	33.5	5.70	29
Wyoming	590,814	6.56	3.5	6.86	13
50 States	241,822,560	4.64(nat'l ave.)		5.39 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 19

ESEA Title I Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$35,340,720	$36.74	5	$42.49	5
Alaska	1,875,848	20.84	19	26.24	17
Arizona	9,545,975	19.80	21	23.22	20
Arkansas	22,029,842	43.20	2	48.59	2
California	81,092,937	16.45	27.5	17.69	31
Colorado	9,072,778	16.38	29	17.30	36
Connecticut	8,853,869	11.84	45	14.00	45
Delaware	2,672,867	17.94	24	21.44	23
Florida	32,413,727	20.91	18	23.90	19
Georgia	35,096,274	28.26	12	31.81	13
Hawaii	2,365,107	11.21	46	13.73	46
Idaho	3,102,317	15.36	35	17.34	35
Illinois	44,857,145	16.02	30	19.73	28
Indiana	15,169,288	11.10	47	12.58	47
Iowa	14,742,312	19.95	20	22.41	21
Kansas	9,938,700	16.45	27.5	19.03	29
Kentucky	30,494,181	35.62	6	43.63	4
Louisiana	30,735,673	28.33	11	35.54	11
Maine	3,502,024	13.42	40	15.08	42
Maryland	14,597,378	14.31	37	16.99	37
Massachusetts	16,981,349	12.34	43	15.26	40
Michigan	32,741,699	13.34	41	15.41	39
Minnesota	18,822,361	18.27	23	21.02	24
Mississippi	36,967,490	54.85	1	63.54	1
Missouri	23,127,206	19.27	22	21.89	22
Montana	3,614,783	17.81	25	20.92	25

Table 19 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 5,820,463	$15.44	34	$17.50	33
Nevada	1,037,600	8.65	50	8.77	50
New Hampshire	1,591,163	8.84	49	10.92	48
New Jersey	24,745,058	13.95	38	17.40	34
New Mexico	9,950,099	31.69	9	36.50	9
New York	121,610,370	27.84	13	35.65	10
North Carolina	49,890,984	37.07	4	41.74	6
North Dakota	4,185,411	22.62	17	28.09	14
Ohio	33,714,245	11.90	44	14.14	44
Oklahoma	16,959,230	27.76	14	28.07	15
Oregon	8,258,894	15.85	32	16.86	38
Pennsylvania	46,549,428	15.86	31	20.17	27
Rhode Island	3,577,736	15.83	33	20.63	26
South Carolina	30,301,502	40.67	3	46.71	3
South Dakota	5,535,124	29.44	10	33.10	12
Tennessee	32,361,667	32.36	8	36.62	8
Texas	74,189,426	25.74	15	27.43	16
Utah	3,165,011	9.98	48	10.51	49
Vermont	1,804,444	15.16	36	18.10	30
Virginia	27,344,952	22.88	16	25.90	18
Washington	11,680,294	13.82	39	14.52	43
West Virginia	16,317,899	35.55	7	39.83	7
Wisconsin	14,541,659	12.37	42	15.23	41
Wyoming	1,515,060	16.83	26	17.61	32
50 States	1,086,401,569	20.85(nat'l ave.)		24.24 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 20

ESEA Title II Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 840,259	$0.8734	48	$1.01	35
Alaska	66,568	0.7396	50	0.93	50
Arizona	422,604	0.8767	45	1.02	31.5
Arkansas	453,532	0.8892	36	1.00	40
California	4,786,011	0.9707	7	1.04	28.5
Colorado	541,044	0.9766	5	1.03	30
Connecticut	717,392	0.9590	12	1.13	9.5
Delaware	134,057	0.8997	34	1.07	23.5
Florida	1,358,173	0.8762	46	1.00	40
Georgia	1,089,383	0.8771	41	0.98	47
Hawaii	193,833	0.9186	29	1.12	11
Idaho	180,728	0.8946	35	1.01	35
Illinois	2,681,475	0.9576	13	1.17	5
Indiana	1,286,642	0.9412	20	1.06	25.5
Iowa	722,942	0.9782	3	1.09	17
Kansas	556,782	0.9218	28	1.06	25.5
Kentucky	759,127	0.8868	38	1.08	21
Louisiana	954,621	0.8798	41	1.10	14
Maine	253,111	0.9697	8.5	1.09	17
Maryland	936,620	0.9182	30	1.09	17
Massachusetts	1,296,227	0.9420	19	1.16	6.5
Michigan	2,326,201	0.9479	15	1.09	17
Minnesota	996,022	0.9670	10	1.11	12.5
Mississippi	589,397	0.8744	47	1.01	35
Missouri	1,144,401	0.9536	14	1.08	21
Montana	185,736	0.9149	33	1.07	23.5

Table 20 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 374,367	$0.9930	1	$1.13	9.5
Nevada	113,689	0.9474	16	0.96	49
New Hampshire	168,878	0.9382	22	1.15	8
New Jersey	1,652,599	0.9315	27	1.16	6.5
New Mexico	288,109	0.9175	31	1.05	27
New York	4,090,893	0.9365	23	1.19	3.5
North Carolina	1,186,993	0.8818	40	0.99	44
North Dakota	162,589	0.8788	42	1.09	17
Ohio	2,661,889	0.9392	21	1.11	12.5
Oklahoma	596,823	0.9767	4	0.98	47
Oregon	485,416	0.9317	26	0.99	44
Pennsylvania	2,767,349	0.9428	18	1.19	3.5
Rhode Island	210,946	0.9333	25	1.21	1
South Carolina	647,442	0.8690	49	0.99	44
South Dakota	181,001	0.9627	11	1.08	21
Tennessee	887,491	0.8874	31	1.00	40
Texas	2,723,308	0.9449	17	1.00	40
Utah	296,752	0.9361	24	0.98	47
Vermont	104,377	0.8771	43	1.04	28.5
Virginia	1,057,993	0.8853	39	1.00	40
Washington	819,428	0.9697	8.5	1.01	35
West Virginia	420,151	0.9153	32	1.02	31.5
Wisconsin	1,153,770	0.9819	2	1.20	2
Wyoming	87,394	0.9710	6	1.01	35
50 States	48,612,535	0.9329(nat'l ave)		1.08 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 21

ESEA Title III Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 2,908,180	$ 3.02	30	$ 3.49	33
Alaska	547,744	6.08	2	7.66	1
Arizona	1,515,932	3.14	23	3.68	25.5
Arkansas	1,713,497	3.35	18	3.77	18
California	14,180,196	2.87	47	3.09	50
Colorado	1,744,119	3.15	22	3.32	43.5
Connecticut	2,331,546	3.12	24	3.68	25.5
Delaware	714,569	4.79	5	5.73	4
Florida	4,528,126	2.92	41	3.33	42
Georgia	3,623,910	2.91	42.5	3.28	46
Hawaii	874,776	4.14	12	5.07	9
Idaho	858,909	4.25	9	4.80	12
Illinois	8,217,090	2.93	40	3.61	27
Indiana	3,980,987	2.91	42.5	3.30	45
Iowa	2,292,488	3.10	26	3.48	34
Kansas	1,942,094	3.21	21	3.71	22
Kentucky	2,622,860	3.06	28	3.75	20
Louisiana	3,074,668	2.83	49	3.55	29.5
Maine	1,031,142	3.95	13	4.44	13
Maryland	2,955,144	2.89	45	3.44	36
Massachusetts	4,149,744	3.01	31.5	3.73	21
Michigan	6,801,005	2.77	50	3.20	47
Minnesota	2,976,699	2.88	46	3.32	43.5
Mississippi	2,068,826	3.07	27	3.55	29.5
Missouri	3,576,532	2.98	34.5	3.38	39
Montana	857,962	4.22	10	4.96	11

Table 21 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 1,353,663	$ 3.59	14	$ 4.11	14
Nevada	646,767	5.38	3	5.47	7.5
New Hampshire	815,216	4.52	6	5.59	5
New Jersey	5,248,181	2.95	38	3.69	23.5
New Mexico	1,112,240	3.54	15	4.08	15
New York	13,245,157	3.03	29	3.88	17
North Carolina	4,011,136	2.98	34.5	3.35	41
North Dakota	815,806	4.40	8	5.47	7.5
Ohio	8,124,223	2.86	48	3.40	37
Oklahoma	2,039,599	3.33	19	3.37	40
Oregon	1,723,476	3.30	20	3.51	32
Pennsylvania	8,698,198	2.96	36.5	3.76	19
Rhode Island	950,667	4.20	11	5.48	6
South Carolina	2,247,045	3.01	31.5	3.46	35
South Dakota	839,155	4.46	7	5.01	10
Tennessee	3,110,281	3.11	25	3.52	31
Texas	8,478,186	2.94	39	3.13	48
Utah	1,113,987	3.51	17	3.69	23.5
Vermont	637,800	5.35	4	6.40	3
Virginia	3,581,329	2.99	33	3.39	38
Washington	2,504,922	2.96	36.5	3.11	49
West Virginia	1,615,011	3.52	16	3.94	16
Wisconsin	3,403,351	2.90	44	3.56	28
Wyoming	580,075	6.44	1	6.74	2
50 States	158,984,216	3.05(nat'l ave.)		3.54 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 22

ESEA Title V Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 531,860	$0.55	30	$0.63	30.5
Alaska	242,131	2.69	2	3.39	1
Arizona	368,490	0.76	19.5	0.89	18
Arkansas	388,193	0.76	19.5	0.85	19
California	1,908,448	0.38	47	0.41	50
Colorado	430,472	0.77	18	0.82	20
Connecticut	449,925	0.60	28	0.71	26
Delaware	261,718	1.75	5	2.09	5
Florida	709,479	0.45	41.5	0.52	42.5
Georgia	628,796	0.50	35	0.56	39
Hawaii	281,390	1.33	11	1.63	9.5
Idaho	283,917	1.40	9	1.58	12
Illinois	1,056,099	0.37	48	0.46	46.5
Indiana	630,850	0.46	40	0.52	42.5
Iowa	461,077	0.62	25.5	0.70	28
Kansas	414,425	0.68	23	0.79	22
Kentucky	477,508	0.56	29	0.68	29
Louisiana	535,430	0.49	37.5	0.61	33.5
Maine	303,881	1.16	13	1.30	13
Maryland	529,669	0.51	33	0.61	33.5
Massachusetts	626,114	0.45	41.5	0.56	39
Michigan	990,466	0.40	45	0.46	46.5
Minnesota	544,184	0.52	32	0.60	35
Mississippi	437,838	0.64	24	0.75	23
Missouri	596,859	0.50	35	0.56	39
Montana	282,290	1.39	10	1.63	9.5

Table 22 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 340,817	$0.90	16	$1.03	16
Nevada	257,521	2.14	3	2.17	4
New Hampshire	269,677	1.50	6	1.85	6
New Jersey	738,898	0.41	44	0.51	44
New Mexico	319,982	1.01	15	1.17	14
New York	1,474,535	0.33	50	0.43	49
North Carolina	669,081	0.49	37.5	0.55	41
North Dakota	273,216	1.47	8	1.83	7
Ohio	1,110,464	0.39	46	0.46	46.5
Oklahoma	441,825	0.72	22	0.73	24
Oregon	392,527	0.75	21	0.80	21
Pennsylvania	1,071,500	0.36	49	0.46	46.5
Rhode Island	280,536	1.24	12	1.61	11
South Carolina	462,194	0.62	25.5	0.71	26
South Dakota	280,643	1.49	7	1.67	8
Tennessee	548,312	0.54	31	0.62	32
Texas	1,214,477	0.42	43	0.71	26
Utah	329,967	1.04	14	1.09	15
Vermont	251,499	2.11	4	2.52	3
Virginia	604,339	0.50	35	0.57	37
Washington	513,297	0.61	27	0.63	30.5
West Virginia	374,730	0.81	17	0.91	17
Wisconsin	565,995	0.48	39	0.59	36
Wyoming	249,634	2.77	1	2.90	2
50 States	27,407,475	0.53(nat'l ave.)		0.60 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 23

ESEA Title VI-A Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$ 571,028	$0.5935	13	$0.61	34.5
Alaska	100,000	1.1111	1.5	1.39	1
Arizona	224,757	0.4663	50	0.54	48
Arkansas	297,836	0.5839	18	0.65	25.5
California	2,397,629	0.4963	45	0.52	50
Colorado	285,258	0.5149	44	0.54	48
Connecticut	369,463	0.4939	46	0.58	42
Delaware	100,000	0.6711	6	0.80	5
Florida	736,246	0.4749	49	0.54	48
Georgia	682,447	0.5494	29	0.61	34.5
Hawaii	113,023	0.5356	34.5	0.65	25.5
Idaho	116,982	0.5791	19	0.65	25.5
Illinois	1,488,885	0.5317	39	0.65	25.5
Indiana	745,215	0.5451	31	0.61	34.5
Iowa	432,885	0.5857	17	0.65	25.5
Kansas	338,673	0.5607	23	0.64	29
Kentucky	509,972	0.5957	11	0.72	9.5
Louisiana	570,824	0.5261	41	0.66	20
Maine	153,967	0.5899	16	0.60	20
Maryland	493,874	0.4841	48	0.57	43
Massachusetts	750,780	0.5456	30	0.67	16.5
Michigan	1,268,699	0.5169	43	0.59	40.5
Minnesota	552,633	0.5365	32	0.61	34.5
Mississippi	399,693	0.5930	14	0.68	13
Missouri	641,800	0.5301	40	0.60	38
Montana	112,296	0.5531	27	0.64	29

Table 23 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$ 217,458	$0.5768	20	$0.66	20
Nevada	100,000	0.8333	4	0.84	4
New Hampshire	100,000	0.5555	25	0.68	13
New Jersey	866,823	0.4886	47	0.60	38
New Mexico	175,883	0.5601	24	0.64	29
New York	2,331,331	0.5337	37	0.68	13
North Carolina	805,195	0.5982	10	0.67	16.5
North Dakota	109,151	0.5900	15	0.73	7.5
Ohio	1,519,923	0.5363	33	0.63	31
Oklahoma	366,917	0.6005	9	0.60	38
Oregon	279,058	0.5356	34.5	0.56	44.5
Pennsylvania	1,672,090	0.5697	21	0.72	9.5
Rhode Island	127,696	0.5650	22	0.73	7.5
South Carolina	448,822	0.6041	7	0.69	11
South Dakota	113,577	0.6024	8	0.67	16.5
Tennessee	592,555	0.5955	12	0.67	16.5
Texas	1,598,917	0.5547	26	0.59	40.5
Utah	165,614	0.5224	42	0.55	46
Vermont	100,000	0.8403	3	1.00	3
Virginia	660,289	0.5525	28	0.62	32
Washington	451,985	0.5348	36	0.56	44.5
West Virginia	314,074	0.6842	5	0.76	6
Wisconsin	625,438	0.5322	38	0.65	25.5
Wyoming	100,000	1.1111	1.5	1.16	2
50 States	28,297,661	0.5430(nat'l ave.)		0.63 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

Table 24

Combined Programs Allocations to States, Fiscal 1968-69

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Alabama	$58,077,211	$60.37	10	$69.83	10
Alaska	17,817,045	197.97	1	249.29	1
Arizona	25,310,132	52.51	20	61.57	16
Arkansas	33,030,324	64.77	8	72.86	9
California	217,799,244	44.18	28	47.53	34
Colorado	31,462,831	56.79	14	60.00	17
Connecticut	19,767,723	26.43	47	31.26	48
Delaware	6,713,843	45.06	26	53.85	25
Florida	69,727,767	44.99	27	51.42	28
Georgia	69,618,088	56.05	15	63.09	14
Hawaii	16,050,887	76.07	3	93.19	2
Idaho	8,916,620	44.14	29	49.84	31
Illinois	86,294,661	30.82	43	37.95	43
Indiana	34,951,217	25.57	49	28.99	50
Iowa	27,407,647	37.09	37	41.66	39
Kansas	26,496,831	43.87	30	50.73	30
Kentucky	51,162,007	59.77	12	73.21	8
Louisiana	47,488,930	43.77	31	54.91	24
Maine	10,317,101	39.52	35	44.44	34
Maryland	50,472,708	49.48	23	58.77	20
Massachusetts	47,074,252	34.21	39	42.31	38
Michigan	62,438,800	25.44	50	29.40	49
Minnesota	33,668,129	32.69	42	37.60	44
Mississippi	49,051,597	72.78	4	84.31	4
Missouri	46,928,098	39.11	36	44.43	35
Montana	11,869,015	58.47	13	68.69	11

Table 24 (continued)

State	Total	Per School Age Child	Rank	Per Student Enrolled in Public Sch.	Rank
Nebraska	$15,841,749	$42.02	32	$48.19	32
Nevada	6,577,005	54.81	16	55.62	23
New Hampshire	6,352,383	35.29	38	43.59	36
New Jersey	54,640,063	30.80	44	38.43	42
New Mexico	24,448,121	77.86	2	89.69	3
New York	182,672,889	41.82	33	53.55	26
North Carolina	80,915,966	60.12	11	67.69	12
North Dakota	9,719,605	52.54	19	65.24	13
Ohio	75,376,449	26.60	46	31.61	47
Oklahoma	37,689,234	61.68	9	62.39	15
Oregon	17,104,948	32.83	41	34.92	45
Pennsylvania	88,327,669	30.10	45	38.24	42
Rhode Island	10,303,196	45.59	25	59.42	19
South Carolina	49,927,908	67.02	6	76.96	5
South Dakota	12,427,475	66.10	7	74.32	7
Tennessee	52,737,674	52.74	18	59.69	18
Texas	143,784,469	49.89	22	53.17	27
Utah	15,320,795	48.33	24	50.88	29
Vermont	3,971,936	33.38	40	39.85	40
Virginia	80,444,819	67.32	5	76.20	6
Washington	34,443,439	40.76	34	42.82	37
West Virginia	23,519,827	51.24	21	57.41	21
Wisconsin	30,218,018	25.72	48	31.66	46
Wyoming	4,930,608	54.78	17	57.32	22
50 States	2,221,608,953	42.63(nat'l ave.)		49.57 (nat'l ave.)	

Sources: Column 1 from U.S. Office of Education; Columns 2 and 4 derived by division of data in Column 1 by data in Appendix A.

APPENDIX D

COMPARISON OF PROGRAM ALLOCATIONS PER CHILD OF SCHOOL AGE (X_1), ALLOCATIONS PER STUDENT ENROLLED IN PUBLIC SCHOOLS (X_2), AND PERSONAL INCOME PER CHILD OF SCHOOL AGE (Y) DATA CONVERTED TO STANDARD AMOUNTS

Tables 25-35

Table 25

P. L. 81-874 Allocations (X_{1a} and X_{2a}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1a}	X_{2a}	Y	State	X_{1a}	X_{2a}	Y
N. Y.	-0.51	-0.46	2.24	Fla.	-0.17	-0.17	0.16
Conn.	-0.48	-0.45	2.03	Minn.	-0.57	-0.53	0.01
Ill.	-0.48	0.44	1.67	Va.	0.66	0.58	-0.005
N. J.	-0.38	-0.33	1.60	Okla.	0.23	0.10	-0.03
Cal.	0.04	-0.01	1.57	Texas	-0.21	-0.24	-0.20
Nev.	0.65	0.45	1.38	Wy.	0.13	0.04	-0.35
Mass.	-0.16	-0.12	1.33	Vt.	-0.65	-0.61	-0.42
Wash.	0.02	-0.04	1.01	Maine	-0.15	-0.15	-0.57
Rd. I.	0.04	0.12	0.90	Tenn.	-0.39	-0.37	-0.69
Del.	-0.09	-0.07	0.85	Ga.	-0.07	-0.09	-0.73
Pa.	-0.56	-0.51	0.78	Ariz.	0.18	0.17	-0.73
Md.	0.44	0.43	0.70	N. Car.	-0.31	-0.30	-0.73
Ohio	-0.52	-0.49	0.57	S. Dak.	0.19	0.15	-0.88
Ind.	-0.55	-0.52	0.43	Ky.	-0.22	-0.18	-0.91
Mich.	-0.61	-0.57	0.41	Mon.	0.33	0.31	-0.92
Hawaii	1.34	1.35	0.38	W. Va.	-0.66	-0.61	-0.98
Kan.	-0.03	-0.03	0.37	Idaho	-0.08	-0.09	-1.01
Ore.	-0.47	-0.46	0.35	N. Dak.	-0.06	-0.02	-1.17
Alaska	6.33	6.44	0.31	Ia.	-0.55	-0.50	-1.17
N. Hamp.	-0.14	-0.10	0.28	Utah	0.32	0.21	-1.26
Colo.	0.43	0.30	0.27	Ark.	-0.45	-0.43	-1.40
Mo.	-0.37	-0.35	0.25	Ala.	-0.23	-0.22	-1.42
Neb.	-0.14	-0.14	0.23	N. Mex.	0.82	0.75	-1.48
Iowa	-0.53	-0.50	0.20	S. Car.	-0.16	-0.16	-1.50
Wisc.	-0.61	-0.55	0.17	Miss.	-0.52	-0.48	-1.97

Table 26

P. L. 81-815 Allocations (X_{1b} and X_{2b}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1b}	X_{2b}	Y	State	X_{1b}	X_{2b}	Y
N. Y.	-0.60	-0.57	2.24	Fla.	0.26	0.23	0.16
Conn.	-0.61	-0.58	2.03	Minn.	-0.61	-0.58	0.01
Ill.	-0.45	-0.42	1.67	Va.	0.89	0.81	-0.005
N. J.	-0.38	-0.35	1.60	Okla.	-0.45	-0.45	-0.03
Cal.	0.49	0.39	1.57	Texas	0.23	0.15	-0.20
Nev.	0.31	0.18	1.38	Wy.	-0.61	-0.58	-0.35
Mass.	-0.57	-0.54	1.33	Vt.	-0.61	-0.58	-0.42
Wash.	-0.29	-0.32	1.01	Maine	-0.61	-0.58	-0.57
Rd. I.	-0.33	-0.28	0.90	Tenn.	-0.58	-0.55	-0.69
Del.	-0.42	-0.39	0.85	Ga.	0.32	0.27	-0.73
Pa.	-0.61	-0.58	0.78	Ariz.	0.52	0.51	-0.73
Md.	-0.37	-0.34	0.70	N. Car.	-0.09	-0.10	-0.73
Ohio	-0.50	-0.48	0.57	S. Dak.	-0.09	-0.10	-0.88
Ind.	-0.55	-0.53	0.43	Ky.	-0.47	-0.44	-0.91
Mich.	-0.57	-0.93	0.41	Mon.	1.47	1.42	-0.92
Hawaii	3.49	3.53	0.38	W. Va.	-0.61	-0.58	-0.98
Kan.	-0.13	-0.13	0.37	Idaho	-0.41	-0.39	-1.01
Ore.	-0.61	-0.58	0.35	N. Dak.	-0.61	-0.58	-1.17
Alaska	4.51	4.69	0.31	La.	-0.45	-0.41	-1.17
N. Hamp.	-0.60	-0.58	0.28	Utah	1.34	1.10	-1.26
Colo.	1.79	1.49	0.27	Ark.	0.33	0.28	-1.40
Mo.	0.01	-0.01	0.25	Ala.	-0.42	-0.39	-1.42
Neb.	-0.01	-0.01	0.23	N. Mex.	-0.24	-0.23	-1.48
Iowa	-0.15	-0.16	0.20	S. Car.	0.12	0.10	-1.50
Wisc.	-0.57	-0.54	0.17	Miss.	-0.52	-0.50	-1.97

Table 27

NDEA Title III Allocations (X_{1c} and X_{2c}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1c}	X_{2c}	Y	State	X_{1c}	X_{2c}	Y
N. Y.	-1.90	-1.66	2.24	Fla.	-0.23	-0.30	0.16
Conn.	-1.86	-1.90	2.03	Minn.	-0.06	-0.12	0.01
Ill.	-1.43	-1.27	1.67	Va.	0.36	0.21	-0.005
N. J.	-1.70	-1.54	1.60	Okla.	0.53	-0.24	-0.03
Cal.	-1.50	-1.87	1.57	Texas	0.76	0.27	-0.20
Nev.	-1.66	-2.24	1.38	Wy.	0.63	0.06	-0.35
Mass.	-1.33	-1.15	1.33	Vt.	0.40	0.57	-0.42
Wash.	-0.73	-1.21	1.01	Maine	0.56	0.36	-0.57
Rd. I.	-0.86	-0.33	0.90	Tenn.	1.16	1.03	-0.69
Del.	-1.23	-1.18	0.85	Ga.	0.90	0.72	-0.73
Pa.	-0.56	-0.15	0.78	Ariz.	0.30	0.36	-0.73
Md.	-0.83	-0.75	0.70	N. Car.	1.16	1.03	-0.73
Ohio	-0.30	-0.21	0.57	S. Dak.	1.26	1.12	-0.88
Ind.	-0.36	-0.51	0.43	Ky.	1.03	1.45	-0.91
Mich.	-0.46	-0.51	0.41	Mon.	0.50	0.57	-0.92
Hawaii	-0.26	0.00	0.38	W. Va.	1.40	1.21	-0.98
Kan.	-0.13	-0.18	0.37	Idaho	0.90	0.75	-1.01
Ore.	-0.33	-0.78	0.35	N. Dak.	1.00	1.48	-1.17
Alaska	-0.80	-0.45	0.31	La.	1.06	1.66	-1.17
N. Hamp.	-0.16	0.15	0.28	Utah	0.83	0.27	-1.26
Colo.	-0.26	-0.75	0.27	Ark.	1.36	1.21	-1.40
Mo.	-0.50	-0.66	0.25	Ala.	1.43	1.48	-1.42
Neb.	0.03	-0.06	0.23	N. Mex.	1.13	1.15	-1.48
Iowa	-0.06	-0.24	0.20	S. Car.	1.30	1.30	-1.50
Wisc.	-0.20	0.09	0.17	Miss.	1.40	1.45	-1.97

Table 28

NDEA Title V-A Allocations (X_{1d} and X_{2d}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1d}	X_{2d}	Y	State	X_{1d}	X_{2d}	Y
N. Y.	-0.33	0.25	2.24	Fla.	-0.50	-0.50	0.16
Conn.	-0.50	-0.25	2.03	Minn.	-0.50	-0.37	0.01
Ill.	-0.33	0.00	1.67	Va.	-0.33	-0.37	-0.005
N. J.	-0.50	0.00	1.60	Okla.	-0.16	-0.75	-0.03
Cal.	-0.33	-0.63	1.57	Texas	-0.16	-0.50	-0.20
Nev.	1.33	0.37	1.38	Wy.	3.66	2.37	-0.35
Mass.	-0.50	0.00	1.33	Vt.	1.33	1.37	-0.42
Wash.	-0.50	-0.87	1.01	Maine	-0.33	-0.37	-0.57
Rd. I.	-0.50	0.12	0.90	Tenn.	-0.16	-0.25	-0.69
Del.	-0.00	0.12	0.85	Ga.	-0.33	-0.37	-0.73
Pa.	-0.33	0.12	0.78	Ariz.	-0.50	-0.37	-0.73
Md.	-0.50	-0.37	0.70	N. Car.	-0.33	-0.37	-0.73
Ohio	-0.33	-0.12	0.57	S. Dak.	-0.16	-0.25	-0.88
Ind.	-0.33	-0.37	0.43	Ky.	-0.33	0.00	-0.91
Mich.	-0.50	-0.37	0.41	Mon.	-0.33	-0.25	-0.92
Hawaii	-0.50	-0.12	0.38	W. Va.	0.00	-0.12	-0.98
Kan.	-0.33	-0.25	0.37	Idaho	-0.33	-0.37	-1.01
Oreg.	-0.33	-0.37	0.35	N. Dak.	-0.33	0.12	-1.17
Alaska	5.50	5.62	0.31	La.	-0.50	0.00	-1.17
N. Hamp.	-0.50	-0.12	0.28	Utah	-0.50	-0.75	-1.26
Colo.	-0.50	-0.75	0.27	Ark.	-0.33	-0.25	-1.40
Mo.	-0.50	-0.50	0.25	Ala.	-0.16	-0.12	-1.42
Neb.	-0.33	-0.25	0.23	N. Mex.	-0.33	-0.25	-1.48
Iowa	-0.33	-0.37	0.20	S. Car.	-0.33	-0.25	-1.50
Wisc.	-0.50	-0.12	0.17	Miss.	-0.16	-0.12	-1.97

Table 29

VEA Basic Grants Allocations (X_{1e} and X_{2e}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1e}	X_{2e}	Y	State	X_{1e}	X_{2e}	Y
N. Y.	-1.42	-1.00	2.24	Fla.	-0.55	-0.60	0.16
Conn.	-1.68	-1.60	2.03	Minn.	-0.35	-0.38	0.01
Ill.	-1.52	-1.27	1.67	Va.	0.48	0.37	-0.005
N. J.	-1.68	-1.40	1.60	Okla.	0.94	0.17	-0.03
Cal.	-1.66	-1.92	1.57	Texas	0.04	-0.35	-0.20
Nev.	-0.43	-1.04	1.38	Wy.	1.47	0.84	-0.35
Mass.	-1.28	-1.00	1.33	Vt.	0.81	1.03	-0.42
Wash.	-0.90	-1.31	1.01	Maine	0.59	0.44	-0.57
Rd. I.	-0.34	0.30	0.90	Tenn.	1.30	1.17	-0.69
Del.	-1.00	-0.85	0.85	Ga.	0.60	0.46	-0.73
Pa.	-0.50	-0.03	0.78	Ariz.	-0.73	-0.67	-0.73
Md.	-1.30	-1.20	0.70	N. Car.	1.41	1.26	-0.73
Ohio	-0.93	-0.81	0.57	S. Dak.	1.68	1.51	-0.88
Ind.	-0.65	-0.74	0.43	Ky.	1.29	1.70	-0.91
Mich.	-1.41	-1.41	0.41	Mon.	0.37	0.44	-0.92
Hawaii	-0.41	-0.10	0.38	W. Va.	1.47	1.28	-0.98
Kan.	-0.03	-0.01	0.37	Idaho	0.79	0.71	-1.01
Ore.	-0.34	-0.74	0.35	N. Dak.	1.80	2.35	-1.17
Alaska	0.53	1.07	0.31	La.	-0.11	0.33	-1.17
N. Hamp.	0.09	0.48	0.28	Utah	-0.62	-1.04	-1.26
Colo.	-0.73	-1.14	0.27	Ark.	1.42	1.26	-1.40
Mo.	-0.22	-0.30	0.25	Ala.	0.87	0.90	-1.42
Neb.	0.54	0.50	0.23	N. Mex.	-0.21	-0.23	-1.48
Iowa	0.64	0.28	0.20	S. Car.	1.06	1.03	-1.50
Wisc.	-0.50	-0.20	0.17	Miss.	1.29	1.31	-1.97

Table 30

ESEA Title I Allocations (X_{1f} and X_{2f}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1f}	X_{2f}	Y	State	X_{1f}	X_{2f}	Y
N. Y.	0.66	0.96	2.24	Fla.	-0.02	-0.04	0.16
Conn.	-0.93	-0.90	2.03	Minn.	-0.29	-0.29	0.01
Ill.	-0.51	-0.40	1.67	Va.	0.17	0.12	-0.005
N. J.	-0.72	-0.61	1.60	Okla.	0.66	0.31	-0.03
Cal.	-0.47	-0.58	1.57	Texas	0.46	0.25	-0.20
Nev.	-1.24	-1.35	1.38	Wy.	-0.43	-0.59	-0.35
Mass.	-0.88	-0.79	1.33	Vt.	-0.60	-0.55	-0.42
Wash.	-0.73	-0.86	1.01	Maine	-0.77	-0.81	-0.57
Rd. I.	-0.53	-0.33	0.90	Tenn.	1.12	1.05	-0.69
Del.	-0.32	-0.26	0.85	Ga.	0.71	0.63	-0.73
Pa.	-0.52	-0.37	0.78	Ariz.	-0.13	-0.10	-0.73
Md.	-0.68	-0.64	0.70	No. Car.	1.59	1.49	-0.73
Ohio	-0.92	-0.89	0.57	S. Dak.	0.83	0.74	-0.88
Ind.	-1.00	-1.02	0.43	Ky.	1.44	1.66	-0.91
Mich.	-0.78	-0.78	0.41	Mon.	-0.33	-0.30	-0.92
Hawaii	-0.99	-0.92	0.38	W. Va.	1.44	1.33	-0.98
Kan.	-0.47	-0.47	0.37	Idaho	-0.58	-0.61	-1.01
Ore.	-0.53	-0.65	0.35	N. Dak.	0.14	0.31	-1.17
Alaska	-0.03	0.15	0.31	La.	0.72	0.96	-1.17
N. Hamp.	-1.23	-1.17	0.28	Utah	-1.12	-1.20	-1.26
Colo.	-0.48	-0.62	0.27	Ark.	2.20	2.09	-1.40
Mo.	-0.19	-0.22	0.25	Ala.	1.56	1.56	-1.42
Neb.	-0.57	-0.60	0.23	N. Mex.	1.05	1.04	-1.48
Iowa	-0.12	-0.17	0.20	S. Car.	1.95	1.92	-1.50
Wisc.	-0.88	-0.79	0.17	Miss.	3.37	3.38	-1.97

Table 31

ESEA Title II Allocations (X_{1g} and X_{2g}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1g}	X_{2g}	Y	State	X_{1g}	X_{2g}	Y
N. Y.	0.50	1.85	2.24	Fla.	-1.00	-0.85	0.16
Conn.	1.00	-0.42	2.03	Minn.	1.25	0.71	0.01
Ill.	1.00	1.57	1.67	Va.	-0.75	-0.85	-0.005
N. J.	0.25	1.42	1.60	Okla.	1.50	-1.14	-0.03
Cal.	1.25	-0.28	1.57	Texas	0.50	-0.85	-0.20
Nev.	0.75	-1.42	1.38	Wy.	1.25	0.71	-0.35
Mass.	0.50	1.42	1.33	Vt.	-1.00	-0.28	-0.42
Wash.	1.25	-0.71	1.01	Maine	1.25	0.42	-0.57
Rd. I.	0.25	2.14	0.90	Tenn.	-0.75	-0.85	-0.69
Del.	-0.50	0.14	0.85	Ga.	-1.00	-1.14	-0.73
Pa.	0.50	1.85	0.78	Ariz.	-1.00	-0.57	-0.73
Md.	0.00	0.42	0.70	No. Car.	-1.00	-1.00	-0.73
Ohio	0.50	0.71	0.57	S. Dak.	1.00	0.28	-0.88
Ind.	0.50	0.00	0.43	Ky.	-0.75	0.28	-0.91
Mich.	0.75	0.42	0.41	Mon.	-0.25	0.14	-0.92
Hawaii	0.00	0.85	0.38	W. Va.	0.00	0.57	-0.98
Kan.	0.00	0.00	0.37	Idaho	-0.75	0.71	-1.01
Ore.	0.25	-1.00	0.35	N. Dak.	-1.00	0.42	-1.17
Alaska	-4.50	-1.85	0.31	La.	-1.00	0.57	-1.17
N. Hamp.	0.50	1.28	0.28	Utah	0.50	-1.14	-1.26
Colo.	1.50	-0.42	0.27	Ark.	-0.75	-0.85	-1.40
Mo.	0.75	0.28	0.25	Ala.	-1.25	-0.71	-1.42
Neb.	1.75	1.00	0.23	N. Mex.	0.00	-0.14	-1.48
Iowa	2.00	0.42	0.20	S. Car.	-1.25	-1.00	-1.50
Wisc.	2.00	2.00	[illegible].17	Miss.	-1.25	-0.71	-1.97

Table 32

ESEA Title III Allocations (X_{1h} and X_{2h}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1h}	X_{2h}	Y	State	X_{1h}	X_{2h}	Y
N. Y.	-0.56	-0.18	2.24	Fla.	-0.70	-0.71	0.16
Conn.	-0.46	-0.37	2.03	Minn.	-0.74	-0.72	0.01
Ill.	-0.68	-0.44	1.67	Va.	-0.61	-0.66	-0.005
N. J.	-0.66	-0.36	1.60	Okla.	-0.22	-0.67	-0.03
Cal.	-0.75	-0.95	1.57	Texas	-0.67	-0.91	-0.20
Nev.	2.16	1.35	1.38	Wy.	3.39	2.59	-0.35
Mass.	-0.59	-0.33	1.33	Vt.	2.12	2.26	-0.42
Wash.	-0.65	-0.93	1.01	Maine	0.50	0.35	-0.57
Rd. I.	0.79	1.36	0.90	Tenn.	-0.47	-0.53	-0.69
Del.	1.47	1.61	0.85	Ga.	-0.70	-0.76	-0.73
Pa.	-0.65	-0.30	0.78	Ariz.	-0.44	-0.37	-0.73
Md.	-0.73	-0.61	0.70	No. Car.	-0.62	-0.69	-0.73
Ohio	-0.76	-0.65	0.57	S. Dak.	1.09	0.91	-0.88
Ind.	-0.70	-0.74	0.43	Ky.	-0.53	-0.31	-0.91
Mich.	-0.87	-0.84	0.41	Mon.	0.81	0.86	-0.92
Hawaii	0.72	0.97	0.38	W. Va.	0.00	-0.12	-0.98
Kan.	-0.36	-0.34	0.37	Idaho	0.84	0.70	-1.01
Ore.	-0.25	-0.54	0.35	N. Dak.	1.02	1.35	-1.17
Alaska	2.97	3.48	0.31	La.	-0.80	-0.50	-1.17
N. Hamp.	1.16	1.47	0.28	Utah	-0.01	-0.36	-1.26
Colo.	-0.02	-0.72	0.27	Ark.	-0.19	-0.29	-1.40
Mo.	-0.62	-0.66	0.25	Ala.	-0.58	-0.56	-1.42
Neb.	0.08	0.03	0.23	N. Mex.	0.02	0.01	-1.48
Iowa	-0.48	-0.57	0.20	S. Car.	-0.59	-0.59	-1.50
Wisc.	-0.72	-0.49	0.17	Miss.	-0.52	-0.50	-1.97

Table 33

ESEA Title V Allocations (X_{1i} and X_{2i}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1i}	X_{2i}	Y	State	X_{1i}	X_{2i}	Y
N. Y.	-0.93	-0.86	2.24	Fla.	-0.72	-0.73	0.16
Conn.	-0.47	-0.45	2.03	Minn.	-0.61	-0.61	0.01
Ill.	-0.86	-0.82	1.67	Va.	-0.64	-0.64	-0.005
N. J.	-0.79	-0.75	1.60	Okla.	-0.27	-0.82	-0.03
Cal.	-0.84	-0.89	1.57	Texas	-0.77	-0.45	-0.20
Nev.	2.13	1.69	1.38	Wy.	3.20	2.76	-0.35
Mass.	-0.72	-0.67	1.33	Vt.	2.08	2.20	-0.42
Wash.	-0.45	-0.57	1.01	Maine	0.47	0.41	-0.57
Rd. I.	0.61	0.86	0.90	Tenn.	-0.57	-0.58	-0.69
Del.	0.99	1.57	0.85	Ga.	-0.64	-0.67	-0.73
Pa.	-0.88	-0.82	0.78	Ariz.	-0.20	-0.19	-0.73
Md.	-0.62	-0.60	0.70	No. Car.	-0.66	-0.69	-0.73
Ohio	-0.83	-0.82	0.57	S. Dak.	1.03	0.95	-0.88
Ind.	-0.71	-0.76	0.43	Ky.	-0.54	-0.50	-0.91
Mich.	-0.81	-0.82	0.41	Mon.	0.86	0.89	-0.92
Hawaii	0.76	0.89	0.38	W. Va.	-0.11	0.16	-0.98
Kan.	-0.33	-0.33	0.37	Idaho	0.88	0.64	-1.01
Ore.	-0.22	-0.32	0.35	N. Dak.	1.00	1.19	-1.17
Alaska	3.06	3.48	0.31	La.	-0.66	-0.60	-1.17
N. Hamp.	1.05	1.22	0.28	Utah	0.27	0.10	-1.26
Colo.	-0.18	-0.29	0.27	Ark.	-0.20	-0.25	-1.40
Mo.	-0.64	-0.67	0.25	Ala.	-0.55	-0.57	-1.42
Neb.	0.03	0.01	0.23	N. Mex.	0.22	0.22	-1.48
Iowa	-0.44	-0.47	0.20	S. Car.	-0.44	-0.45	-1.50
Wisc.	-0.67	-0.63	0.17	Miss.	-0.40	-0.39	-1.97

Table 34

ESEA Title VI-A Allocations (X_{1j} and X_{2j}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1j}	X_{2j}	Y	State	X_{1j}	X_{2j}	Y
N. Y.	-0.46	0.06	2.24	Fla.	-0.92	-0.86	0.16
Conn.	-0.84	-0.60	2.03	Minn.	-0.38	-0.40	0.01
Ill.	-0.46	-0.13	1.67	Va.	-0.30	-0.33	-0.005
N. J.	-0.84	-0.46	1.60	Okla.	0.07	-0.46	-0.03
Cal.	-0.69	-1.00	1.57	Texas	-0.30	-0.53	-0.20
Nev.	1.84	1.13	1.38	Wy.	4.00	3.26	-0.35
Mass.	-0.30	0.00	1.33	Vt.	1.92	2.20	-0.42
Wash.	-0.46	-0.73	1.01	Maine	0.00	-0.06	-0.57
Rd. I.	-0.15	0.40	0.90	Tenn.	0.07	0.00	-0.69
Del.	0.92	0.86	0.85	Ga.	-0.30	-0.40	-0.73
Pa.	-0.15	0.33	0.78	Ariz.	-0.92	-0.86	-0.73
Md.	-0.84	-0.66	0.70	No. Car.	0.07	0.00	-0.73
Ohio	-0.38	-0.26	0.57	S. Dak.	0.07	0.00	-0.88
Ind.	-0.30	-0.40	0.43	Ky.	0.07	0.33	-0.91
Mich.	-0.53	-0.53	0.41	Mon.	-0.30	-0.20	-0.92
Hawaii	-0.38	-0.13	0.38	W. Va.	0.69	0.60	-0.98
Kan.	-0.23	-0.20	0.37	Idaho	-0.07	-0.13	-1.01
Ore.	-0.38	-0.73	0.35	N. Dak.	0.00	0.40	-1.17
Alaska	4.00	4.80	0.31	La.	-0.46	-0.06	-1.17
N. Hamp.	-0.23	0.06	0.28	Utah	-0.53	-0.80	-1.26
Colo.	-0.61	-0.86	0.27	Ark.	-0.07	-0.13	-1.40
Mo.	-0.46	-0.46	0.25	Ala.	0.00	-0.40	-1.42
Neb.	-0.07	-0.06	0.23	N. Mex.	-0.23	-0.20	-1.48
Iowa	0.00	-0.13	0.20	S. Car.	0.07	0.13	-1.50
Wisc.	-0.46	-0.13	0.17	Miss.	0.00	0.06	-1.97

Table 35

Combined Programs Allocations (X_{1k} and X_{2k}) and Personal Income (Y) Converted to Standard Amounts

State	X_{1k}	X_{2k}	Y	State	X_{1k}	X_{2k}	Y
N. Y.	-0.33	-0.14	2.24	Fla.	-0.20	-0.21	0.16
Conn.	-0.94	-0.85	2.03	Minn.	-0.69	-0.65	0.01
Ill.	-0.76	-0.64	1.67	Va.	0.67	0.57	-0.005
N. J.	-0.77	-0.62	1.60	Okla.	0.45	0.13	-0.03
Cal.	-0.23	-0.33	1.57	Texas	-0.01	-0.15	-0.20
Nev.	-0.18	-0.08	1.38	Wy.	0.18	-0.02	-0.35
Mass.	-0.63	-0.50	1.33	Vt.	-0.66	-0.58	-0.42
Wash.	-0.37	-0.48	1.01	Maine	-0.42	-0.43	-0.57
Rd. I.	-0.18	0.03	0.90	Tenn.	0.09	0.04	-0.69
Del.	-0.20	-0.13	0.85	Ga.	0.23	0.15	-0.73
Pa.	-0.79	-0.63	0.78	Ariz.	0.09	0.10	-0.73
Md.	-0.02	0.01	0.70	No. Car.	0.39	0.30	-0.73
Ohio	-0.93	-0.81	0.57	S. Dak.	0.62	0.51	-0.88
Ind.	-0.97	-0.92	0.43	Ky.	0.37	0.47	-0.91
Mich.	-0.98	-0.91	0.41	Mon.	0.32	0.33	-0.92
Hawaii	1.02	1.11	0.38	W. Va.	0.04	-0.02	-0.98
Kan.	-0.25	-0.23	0.37	Idaho	-0.24	-0.26	-1.01
Ore.	-0.69	-0.74	0.35	N. Dak.	0.08	0.22	-1.17
Alaska	5.86	6.07	0.31	La.	-0.25	-0.10	-1.17
N. Hamp.	-0.59	-0.46	0.28	Utah	-0.07	-0.23	-1.26
Colo.	0.26	0.05	0.27	Ark.	0.57	0.46	-1.40
Mo.	-0.44	-0.43	0.25	Ala.	0.40	0.36	-1.42
Neb.	-0.32	-0.31	0.23	N. Mex.	1.09	1.00	-1.48
Iowa	-0.52	-0.52	0.20	S. Car.	0.66	0.59	-1.50
Wisc.	-0.97	-0.84	0.17	Miss.	0.89	0.83	-1.97

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BIOGRAPHICAL SKETCH

Edgar Hugh Bedenbaugh, Jr. was born June 8, 1936, at Lake City, Florida. In June, 1954, he was graduated from Columbia High School in Lake City. In February, 1958, he received the degree of Bachelor of Arts with a major in education from the University of Florida. From 1958 until 1964, he was employed as a social studies teacher at Columbia High School. In 1963, he enrolled in the Graduate School of the University of Florida. He received the degree of Master of Education in 1964. From 1964 until 1966, he served as principal of Fort White Public School in Columbia County. From 1966 until September, 1968, he held the position of Assistant Superintendent for Instruction in the Columbia County school system. From September, 1968, until the present time he has pursued his work toward the degree of Doctor of Education.

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This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Education and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Education.

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